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ABSTRACT

Information is presented from a study by the Council of New Jersey State College Locals to get facts on budgets, enrollments, New Jersey, the nation, and trends over the last decade in order to help the citizens of New Jersey determine what policies will best meet their needs in the 1990s. In June of 1987, the Chancellor submitted a Five-Year Agenda to the Board of Higher Education. Designed as a comprehensive planning document for higher education, its goals include better access, increased minority participation, ensured college affordability, improved physical facilities, funding levels consistent with excellence, and increased autonomy. However, it ignores the increases in the college-age population expected after 1995 and the effects of the very significant projected increase in the over-35 population which is already underway. It accepts declining enrollment as inevitable despite a stated commitment to access and equity. Study results indicate the following: a striking feature of New Jersey higher education is low enrollments; demographic trends are no worse in New Jersey than in states that have experienced enrollment increases instead of decreases; the enrollment decline is driven as much or more by policy decisions and unstated goals as by demographic trends; and the central concern of higher eduction policy in New Jersey should shift from management of decline to building a bridge to the future since the college-age population will begin to increase in 5 or 6 years. (SM)

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MANAGEMENT OF DECLINE

OR

BRIDGE TO THE FUTURE?

Preparing the New Jersey State Colleges for the 1990's

by

Carol Frances and Thomas H. Wirth

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A Special Report Prepared for the

Council of New Jersey State College Locals

and the

American Federation of Teachers, AFL-CIO

April, 1989

HE 022 779

WHY THIS REPORT?

In June, 1987, Chancellor T. Edward Hollander submitted a *Five-Year Agenda* to the New Jersey Board of Higher Education. The *Agenda* is a statement of the policy goals of the Board and Department of Higher Education.

These stated goals seem inconsistent with the conditions our members – the faculty, librarians, and professional staff of New Jersey's state colleges – see on campus. Nor are the Board of Higher Education or the Chancellor calling for the increased financial commitments which seem necessary to accomplish what they say they are trying to do.

So the Council commissioned this study to get the facts -- facts about budgets, facts about enrollments, facts about New Jersey, facts about the nation, and facts about the trends over the last decade which, extended into the future, are important features of the planning environment for the 1990's.

The research reported here shows that enrollment in New Jersey colleges and universities is comparatively low and has been declining. In the state colleges, where we work, the decline is especially severe and has lasted more than a decade. In their planning documents, the Chancellor and the BHE accept this decline as inevitable, despite a stated committment to access and equity.

This study shows that the enrollment decline is driven as much or more by policy decisions and unstated goals as by demographic trends.

Fiscal policy, funding priorities, and the adverse impact of inadequate funding on the achievement of stated goals have been topics conspicuously absent from the public policy discussions of the Board of Higher Education. We are publishing this report in the hope of stimulating, and contributing to, a more open and informed discussion of higher education policies and to help the citizens of New Jersey determine what policies will, in fact, best meet their needs in the 1990's.

– Marcoantonio Lacatena, President

MANAGEMENT OF DECLINE

OR

BRIDGE TO THE FUTURE?

Preparing the New Jersey State Colleges for the 1990's

by

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We acknowledge the help of Professor Marcoantonio Lacatena, President of the Council of New Jersey State College Locals, in identifying areas of needed research. The report also reflects the extremely valuable comments of members of the Council.

Dr. F. Howard Nelson, Assistant Director of the Department of Research of the American Federation of Teachers, assisted in preparing the computer graphics.

Richard Wabnick and Joe Williams of the Applied Systems Institute in Washington, D.C. were responsible for the special computer runs to generate enrollment and financial trend data for New Jersey colleges and universities used in the analyses.

We are particularly indebted to statisticians at the U.S. Bureau of the Census and the U.S. Department of Education, National Center for Education Statistics, for the national and state data used in developing comparisons with New Jersey.

– T. H.W. and C.F.

CONCLUSIONS

A striking feature of New Jersey higher education is low enrollments – per-capita college enrollments and college going rates far below national averages and enrollment declines instead of the enrollment increases experienced by other states.

Demographic trends are no worse in New Jersey than in states which have experienced enrollment increases instead of enrollment decreases.

Yet, Chancellor Hollander's *Five-Year Agenda*, New Jersey's most recent comprehensive planning document for higher education, assumes continued demographically-driven enrollment declines.

The increases in the college-age population expected after 1995 are ignored in the Chancellor's *Agenda*, as are the effects of the very significant projected increase in the over-35 population which is already underway.

The analyses of population trends, outmigration, and college-going rates indicate that the foundation on which the state planning process is being built – that is, a projected enrollment decline – is not inevitable. Rather, enrollment trends have been, are now, and will be significantly affected by state higher education policies.

The state colleges are the sector most directly affected by Board of Higher Education policy. **Enrollment declines in the state colleges have been far more extensive and sustained than in any other sector of higher education in New Jersey or in four-year colleges in other states.**

Enrollment decline should not be taken as a given. It is only one of the possible future scenarios for New Jersey. Policy alternatives with different probable impacts on enrollments should be openly debated.

What specific state policies affect college enrollments? How do they operate? What has been the impact of fiscal constraints on the achievement of stated goals? Might different policies better serve the people of the state?

Five or six years from now, demographic trends will reverse, and the college- age population will begin to increase. Should not the central concern of higher education policy in New Jersey shift from management of decline to building a bridge to the future?

ANALYTICAL APPROACH

In June, 1987, the Chancellor submitted a *Five-Year Agenda* to the Board of Higher Education. The *Agenda*, together with associated policy papers, sets forth the current higher education policy goals for the State of New Jersey. It is the point of departure for this analysis.

FACTS IMPORTANT TO THE ASSESSMENT OF NEW JERSEY'S PERFORMANCE IN ACHIEVING STATED BHE GOALS

Examination of data from federal and state sources reveals many facts which are relevant to the Board of Higher Education's policy goals as stated in Chancellor Hollander's *Five-Year Agenda* of June, 1987.

BHE GOAL: ACCESS

- **Enrollments are decreasing in most sectors of higher education in New Jersey. Nationally, enrollments are holding even or increasing. New Jersey ranked 49th out of the 50 states in percent change in college enrollment between 1980 and 1986.**
- **Total FTE enrollment in New Jersey per 1,000 population is among the lowest in the nation. If the college-going rates in New Jersey were equal to the national average college-going rates for each age group, New Jersey would have enrolled 83,000, or 28 percent, more college students in 1985 than it actually did.**
- **Unusually large numbers of students must leave New Jersey to attend college. New Jersey has the largest net out-migration of new college students of any state in the nation. In 1986, New Jersey's net out-migration was more than three times greater than that of New York, the state with the next-largest outflow of students.**

BHE GOAL: INCREASING MINORITY PARTICIPATION

- **New Jersey made greater percentage gains than the national average in minority enrollments in the 1970's, but the state has suffered greater than average percentage decreases in the 1980's in the enrollment of African-Americans.**

BHE GOAL: ENSURING COLLEGE AFFORDABILITY

- **Public college tuitions in New Jersey are among the highest in the nation. New Jersey was seventh on the list of states ranked by average undergraduate tuition and fees in public four-year colleges in 1986-1987.**
- **Students and their families are paying a higher and higher proportion of college costs. In 1981-82, they paid 62% of college costs. In 1987-88, the proportion had risen to 80%.**
- **Because the Jobs, Education, and Competitiveness Bond Act of 1988 required institutional matching funds, students will be forced to pay for academic buildings through increased tuition for the first time in the history of New Jersey.**

BHE GOAL: IMPROVED PHYSICAL FACILITIES

- New Jersey college and university students currently have less than half the space per FTE student that the average student has nationally.
- No major academic buildings have been constructed at the state colleges in more than fifteen years.
- Even after the construction financed by the Jobs, Education and Competitiveness bond issue is completed, New Jersey students will have less than 65% of the national average space per FTE student.
- New Jersey's higher education institutions have identified new construction needs of $1.1 billion over the next decade.

BHE GOAL: FUNDING LEVELS CONSISTENT WITH EXCELLENCE

- New Jersey ranks close to the bottom (47th in 1985-1986 and 43rd in 1986-1987) in the share of state and local tax revenues allocated to public higher education.
- Higher education receives a smaller percentage of the state budget now than it did in 1976.
- Since 1978, the percentage of New Jerseyans' personal income spent on public higher education has declined.

BHE GOAL: INCREASED AUTONOMY

- Appropriations for the New Jersey Department of Higher Education's expenditures for management and administrative services, which include the department's centralized program initiatives, have increased ten-fold in the last eight fiscal years.
- The $37.9 million adjusted appropriation for Department of Higher Education management and administrative services for FY 1989 is larger than the appropriation for any one of New Jersey's state colleges except Montclair.

CHANCELLOR HOLLANDER'S PLANNING PREMISES

The basic assumption underlying the Chancellor's *Five-Year Agenda* is that college enrollment in New Jersey is primarily determined by the size of the college-age population.

The Chancellor's *Agenda* begins with these citations of official projections:

"Between 1980 and 2000, the number of New Jerseyans in the 15-24 age range will decrease by more than 20%."

"Full-time New Jersey college enrollments are expected to drop by as much as 28% by 1995."

"We already have seen a decline in the number of full-time first-time freshmen (from over 45,000 in 1979 to fewer than 34,000 in 1986)."

The Chancellor's approach to planning for the future of higher education in New Jersey is:

"Between 1980 and 2000, the number of New Jerseyans in the 15-24 age range will decrease by more than 20%."

"Full-time New Jersey college enrollments are expected to drop by as much as 28% by 1995."

Chancellor's premise: College-age population is the primary determinant of college enrollment.

Chancellor's projection: College-age population is projected to decline.

Chancellor's policy conclusion: Given the probable decline in college enrollment, the state should switch from development and expansion of the higher education system to other goals, such as improving access and enhancing quality.

PROBLEM: NARROW CONCEPTUAL FRAMEWORK

PROBLEMS WITH THE CHANCELLOR'S PLANNING MODEL

The Chancellor's *Agenda* incorporates a planning model which (1) is based on the college-age population as the primary determinant of college enrollment; and (2) projects declining college-age population and declining college enrollment.

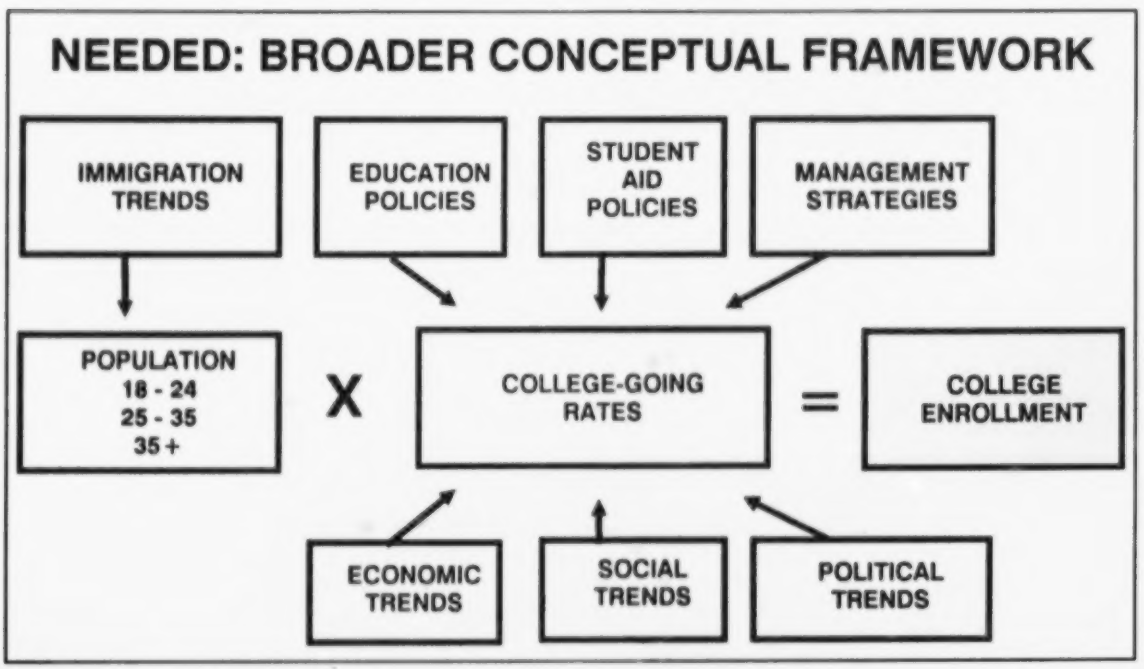
There are fundamental problems with both the planning model and the demographic analysis.

First, the Chancellor's planning model is too narrowly conceived. It is based only on 15 to 24 year-old population trends, ignoring the older age groups from which college students are also drawn. A more comprehensive approach to planning for higher education, in contrast, would examine trends in all the relevant age groups.

The second problem is that the demographic projections are presented with data points for only the beginning and the end of the planning period (1980 - 2000). Analysis of the year-to-year changes within the period reveals that after 1995, the size of the relevant populations will be increasing. The increases will continue well into the next century. This fact significantly affects conclusions about the future planning imperatives for higher education.

Finally, the Chancellor's planning model is used to support only one set of policy recommendations. A more comprehensive, and technically more defensible, approach to planning for higher education in New Jersey would involve explicit analysis of the different effects of alternative policies on college enrollment.

The important distinctions between these approaches to planning for higher education in New Jersey are discussed on the following pages.



TIME FRAME FOR THE ANALYSIS

The Chancellor's *Five-Year Agenda* states that "Between 1980 and 2000, the number of New Jerseyans in the college-going age group will decrease by more than 20 percent. That translates into . . . fewer potential college students." In other words, the policy planners' task is **management of decline.**

The decline in the college-age population used in the Chancellor's *Agenda* to predict college enrollment actually occurs between 1980 and 1995, as shown in Exhibit II-1 below. After 1995, however, the trend will reverse, and the 15-to- 24-year-old population will increase, as shown in Exhibit II-2. This increase will continue and, indeed, accelerate through 2005 and beyond.

The increases in the college-age population which will occur in the years after 1995

Exhibit II-1

CHANCELLOR HOLLANDER'S PLANNING ENVIRONMENT

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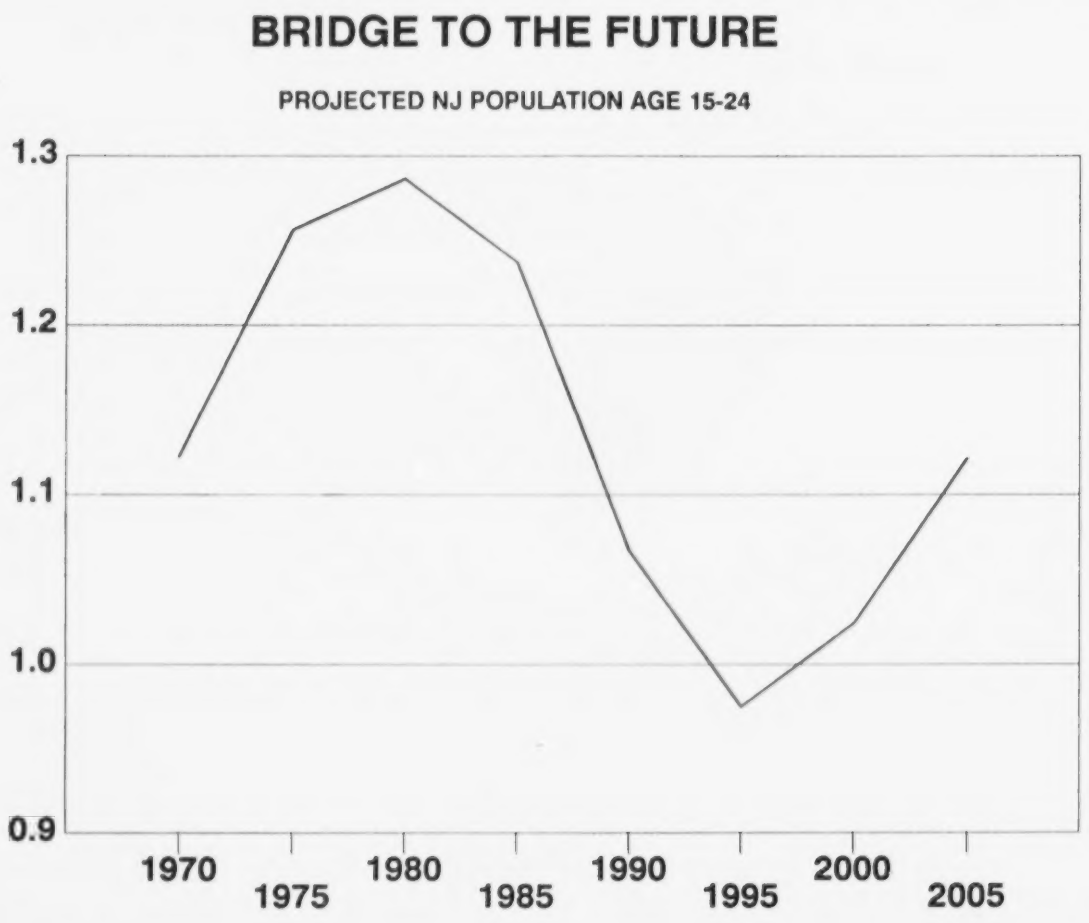
are omitted from the discussion in the Chancellor's *Agenda*. They are, however, critically important. By next year (1990), New Jersey will already have experienced 70 percent of the total decrease of 311,000 in the 15-to-24- year-old age group projected between 1980 and 1995.

Looking forward from 1990, not from 1980, New Jersey faces a decrease in the college-age group through 1995, which is offset by an increase in the size of the group over the following five years, ending up in 2000 with nearly as many people in the age bracket as in 1990, with further increases projected for the years beyond 2000.

Thus, the real task at hand may not be "management of decline," but **BUILDING A BRIDGE TO THE FUTURE.**

Exhibit II-2

ALTERNATIVE PLANNING ENVIRONMENT



OLDER, NON-TRADITIONAL STUDENTS

More than 40 percent of college students in the United States are 25 years of age and over.

Thus, the demographic trends used in making college enrollment projections should include all population groups from which college students are drawn, not just the 15-to-24-year-old group. The Chancellor does not do this in his *Five-Year Agenda.*

If all age groups are considered, the projection of college enrollment trends in New Jersey through the year 2000 is quite different from the Chancellor's.

Nationally, 7.7% of the population age 25 to 34 enroll in college (See the Appendix). This is a significant percentage. This age group increased in size between 1980 and 1990, and will decrease between 1990 and 2000. Even so, it will be larger in 2000 than it was in 1980.

Only 2.5% of the nation's population age 35 to 64 enrolls in college, but the size of this group is large and growing steadily larger. It contributes significantly to enrollments despite its low college-going rate.

As an example of the more sophisticated planning approach which should be used, the change in New Jersey college enrollment to be expected between 1980 and 2000 has been calculated by treating each age group separately. The national college-going rate for each age group was applied to the U.S. Census Bureau's projected population change for that age group in New Jersey, producing a projected enrollment change for the group. The projected changes for the separate age groups were then added to obtain an overall projected enrollment change. These results, expressed as percentages of New Jersey's total 1980 enrollment (322,000) are displayed in Exhibit II-3. (Again, see the Appendix.)

As can be seen from Exhibit II-3, the increasing enrollments which can be expected from the growing over-25 population, which the Chancellor ignores, cancel out more than half the projected enrollment decreases from the shrinking 18-to-24-year-old cohort.

These calculations should be further refined, using New Jersey college-going rates rather than national college-going rates.

Clearly, however, projections which are based only on population trends in the 15-to-24-year-old age group, and which ignore older students, are not an adequate foundation for planning the future of higher education in New Jersey.

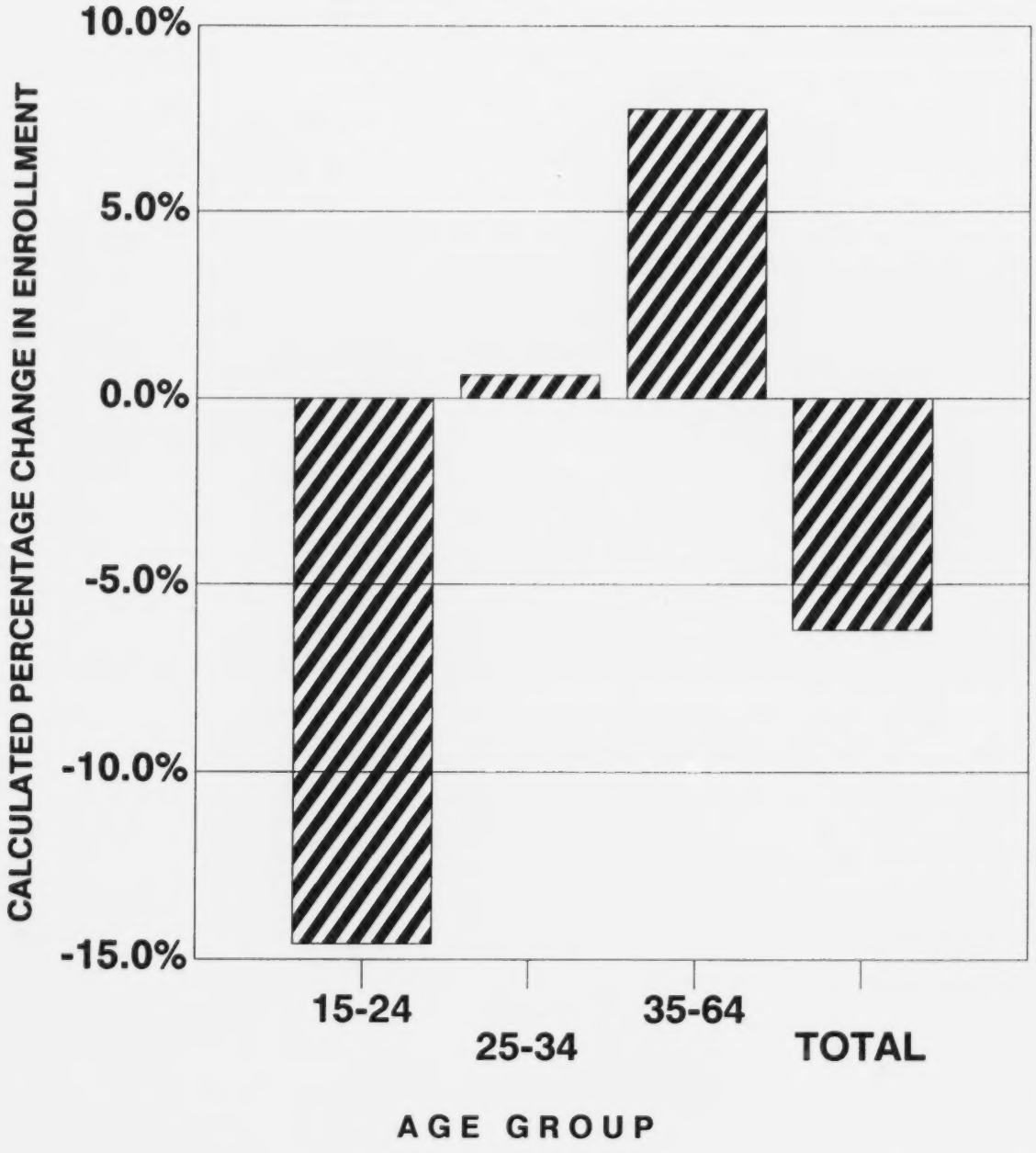
Between 1980 and 2000, the increasing enrollments which can be expected from the growing over-25 population cancel out more than half the projected enrollment decreases from the shrinking 18-to-24-year-old cohort.

Exhibit II-3

IMPACT OF PROJECTED POPULATION TRENDS ON NEW JERSEY COLLEGE ENROLLMENT

1980 - 2000

(SAMPLE CALCULATION)



OUT-MIGRATION OF STUDENTS

Migration of students out of the state of New Jersey to obtain their college education in other states is a substantial factor in the New Jersey college enrollment picture.

Comparing the net in-/out-migration figures for the 50 states, New Jersey is a distant last. In the late 1960's and early 1970's, many more students left the state to go to college than remained in the state. Since then, the situation has improved considerably: by the mid-1980's, net out-migration of college students from New Jersey dropped to less than a third of those peak levels. Even so, the net out migration of new students from New Jersey in 1986 was more than three times that of New York, which had the next-highest net out-migration.

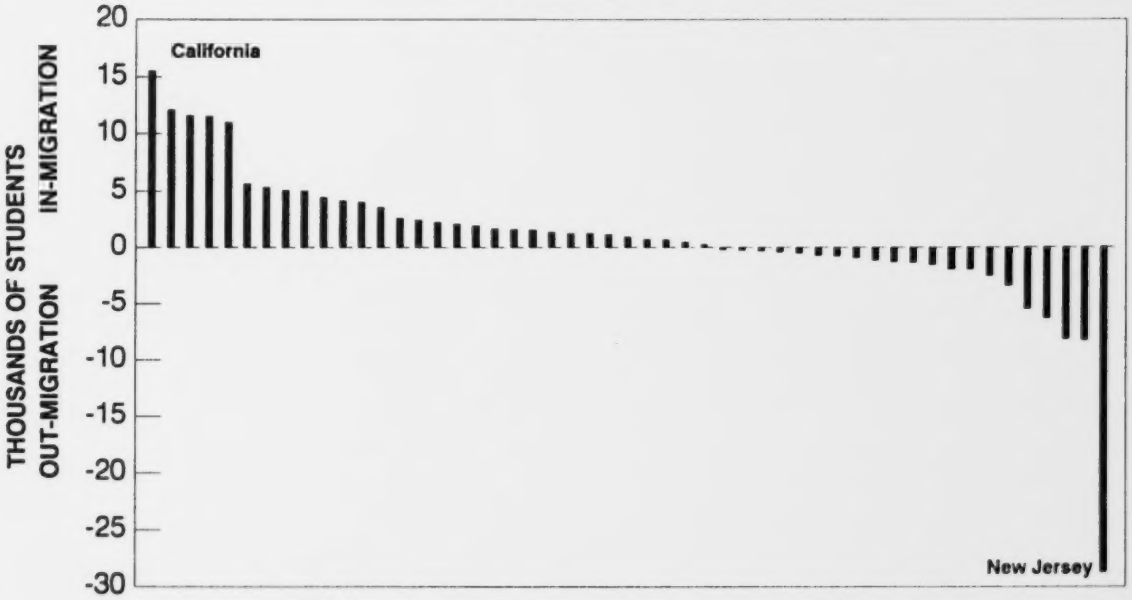
Nationally, there has been a dramatic reduction in the number of students who leave their home state to go to college out-of-state. This drop in out-migration is apparently due in part to widespread increases in out-of-state tuitions. The drop is not due to declining enrollments of the more mobile college-age students: while the size of the 18-to-24-year-old age group declined, their college-going rate increased nationally, resulting in increased college enrollment of that age group in the first half of the 1980's.

The net out-migration of new college students for New Jersey compared with all other states is shown below.

Further reduction of out-migration, which will occur if current trends continue, would have a measurable impact on enrollment in the state in the 1990's.

Exhibit II-4

NET MIGRATION OF NEW COLLEGE STUDENTS
FALL 1986



DECREASES IN TOTAL ENROLLMENT

Between 1980 and 1986, the latest year for which we have state-by-state data, total enrollment in New Jersey decreased 8.2 percent, compared with a 3.3 percent **increase** for the nation as a whole. This enrollment decrease puts New Jersey 49th on a list of the 50 states ranked in descending order of enrollment growth, as shown in Exhibit III-1.

Thirty-eight states had clear enrollment increases; another three states held even, that is, had enrollments which increased or decreased by less than one percent. Only nine states had enrollment decreases of more than one percent.

The two states which had enrollment decreases comparable to or greater than New Jersey's, Washington and Oregon, had just made significant changes in their higher education policies. Both had suffered a collapse of the forest industries, and Washington experienced a crisis in the aerospace industry, resulting in a severe economic depression requiring state budget cutbacks, expenditure increase caps, enrollment caps, and year-to-year tuition increases of up to 65 percent. In the District of Columbia, which also suffered an enrollment decrease comparable to New Jersey's, the University of the District of Columbia underwent a serious budget crunch.

The Chancellor's *Five Year Agenda* and other reports prepared by the New Jersey State Department of Higher Education create the impression that the decline in the state's college enrollment is the result of demographic trends. Demographic trends do affect enrollment trends, but they do not, by themselves, explain differences between enrollment trends in New Jersey and in the country as a whole.

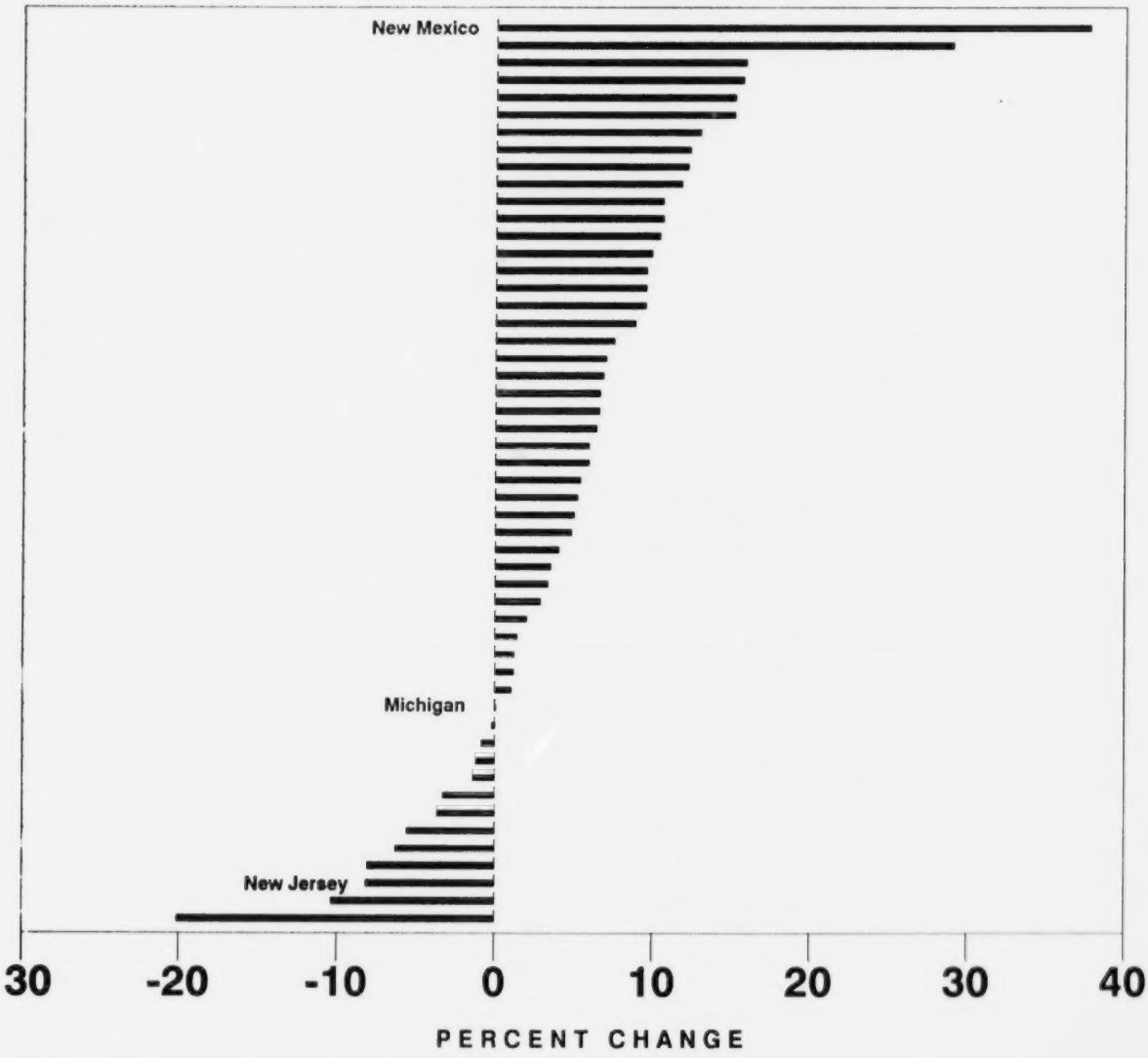
Census data indicate that from 1980 to 1986, the 18-to-24-year-old population in New Jersey did not decrease as much as it did in the nation as a whole. There was a decrease of about 0.9 percent in New Jersey compared with a decrease of about 7.6 percent for the nation, as illustrated in Exhibit III-2. Yet, college enrollment decreased 8.4 percent in New Jersey while, in contrast, enrollment **increased** by 3.3 percent nationwide — **the opposite of what would have happened if demographics had been the primary determinant of national enrollment trends.**

Comparing the net in-/out-migration figures for the 50 states, New Jersey is a distant last. The net out-migration of new students from New Jersey in 1986 was more than three times that of New York, which had the next highest out-migration.

Exhibit III-1

STATES RANKED BY PERCENTAGE CHANGE IN TOTAL COLLEGE ENROLLMENT

1980 - 1986

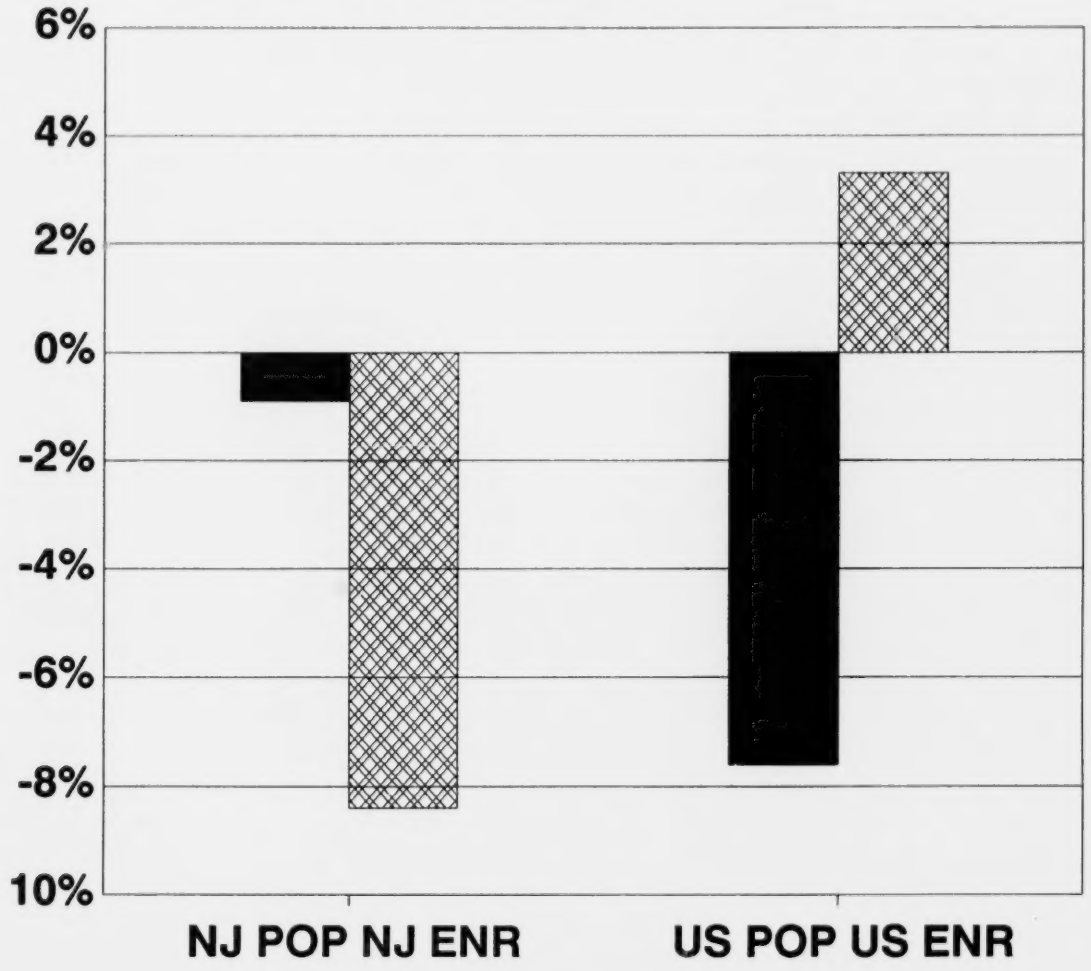


Only the state of Washington and the District of Columbia had greater percentage decreases in college enrollments than New Jersey did between 1980 and 1986.

Exhibit III-2

CHANGES IN POPULATION AGE 18 - 24 AND CHANGES IN COLLEGE ENROLLMENT FOR NEW JERSEY AND THE UNITED STATES

1980 - 1986



Despite a college-age population decline which was much larger than New Jersey's, college enrollments in the nation as a whole increased between 1980 and 1986. New Jersey's enrollments, in contrast, decreased during the same period.

ENROLLMENT DECLINE IN THE STATE COLLEGES

Enrollment decline has been particularly dramatic in New Jersey's state college sector. Between 1980 and 1986, the decline was 16.4 percent – nearly double the 8.4 percent decline in New Jersey's total enrollments. State college FTE enrollment has declined by close to 30 percent since 1976, as shown in Exhibit III-3.

State college FTE enrollment has declined by close to 30 percent since 1976.

Enrollment trends in the individual state colleges are displayed in Exhibit III-4. For the most part, they parallel the trends in the state college sector as a whole.

Trends in the other sectors of public higher education in New Jersey are very different. In the community colleges, FTE enrollment increased by 13 percent between 1976 and 1981, even as it was decreasing by 13 percent in the state colleges.

After 1983, community college enrollment declined; in 1987-1988, it was 16% lower than the 1983 maximum. But the cumulative change between 1976 and 1988 was a decline of only 4 percent – in sharp contrast with the 30 percent decline in state college enrollment during the same period.

Since 1983, enrollment at Rutgers, the state university, has remained approximately constant. Enrollment at NJIT has steadily increased.

One mechanism for controlling enrollments is admissions policies. Rutgers and NJIT set their own admissions policies. Admissions policies for the state colleges are set by the Board of Higher Education. Among New Jersey's public institutions of higher education, only the community colleges have open admissions.

Community college enrollments are therefore less susceptible to policy control than those of other public institutions (although they are affected by other policies, most notably, tuition policy).

The state college enrollment decline between 1976 and 1983, and the constant enrollments at Rutgers and NJIT since 1983, are significant deviations from community college trends. It seems reasonable to infer that policy considerations contributed to these deviations.

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Exhibit III-3

NEW JERSEY COLLEGE ENROLLMENTS

INDEX: 1976 = 1.00

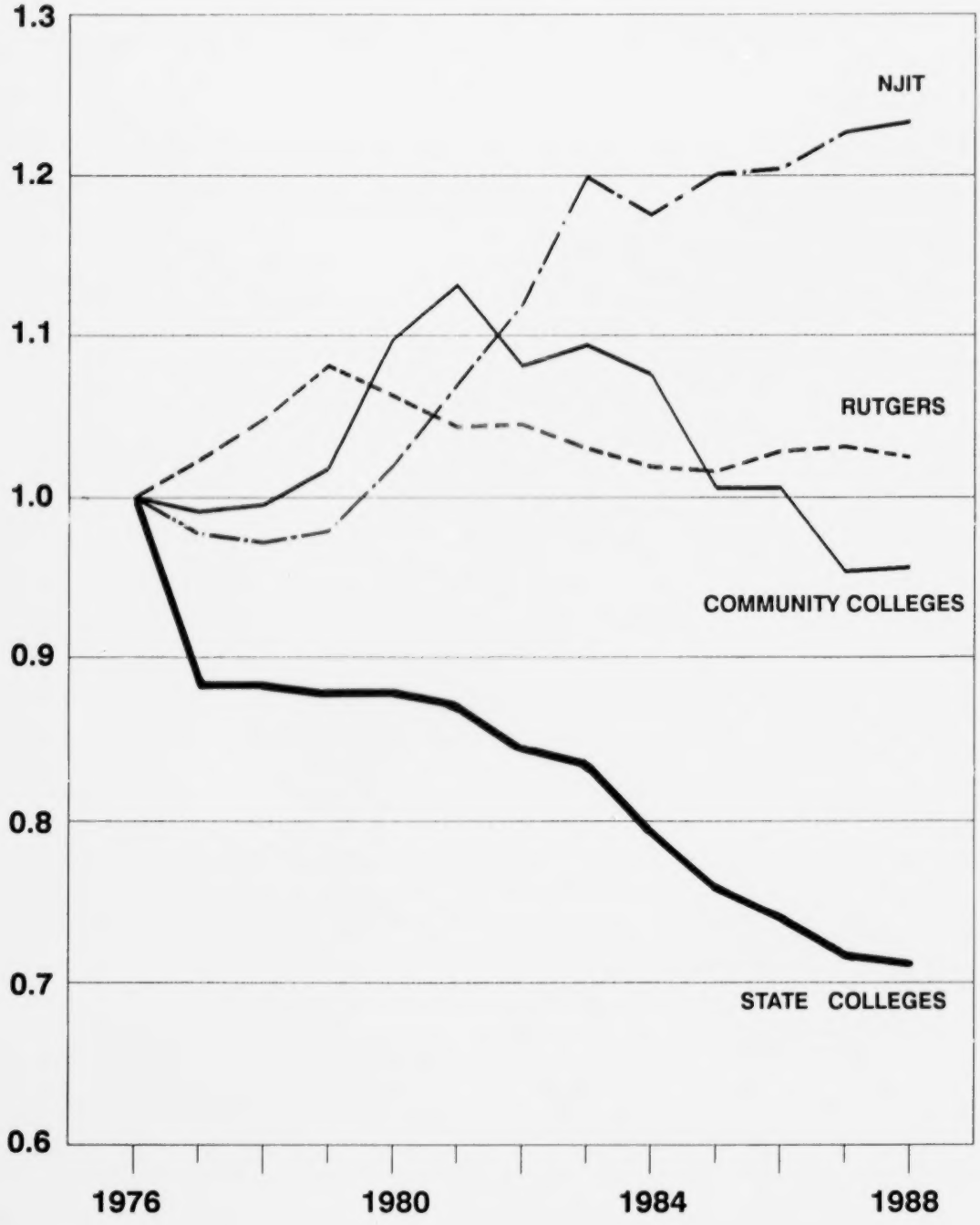
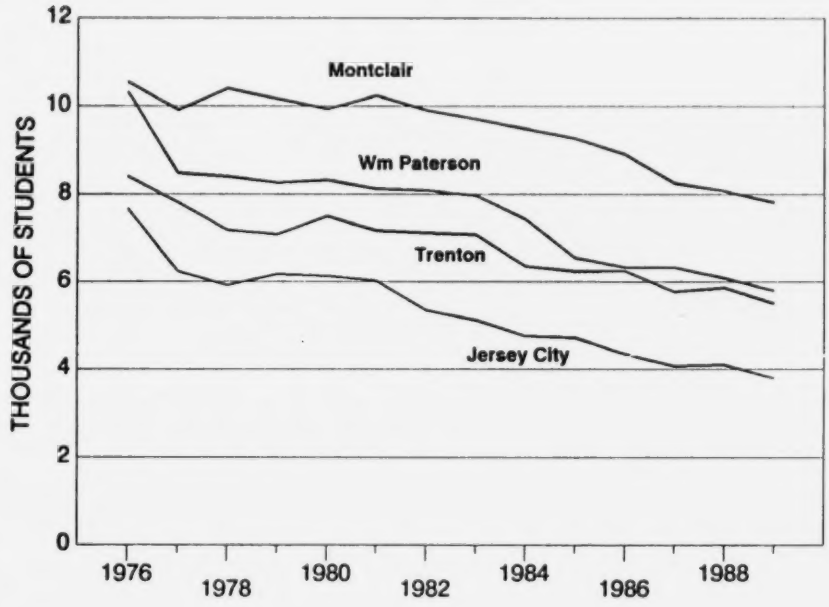
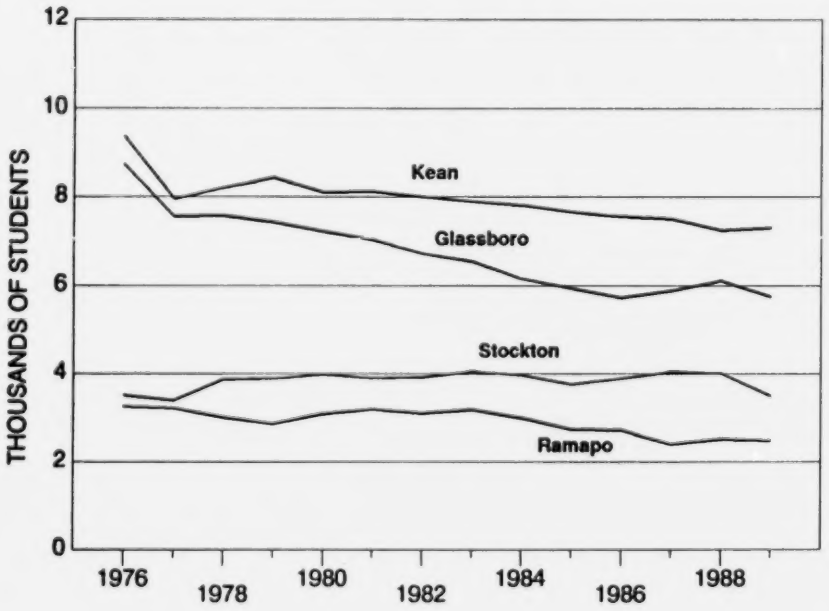


Exhibit III-4

NEW JERSEY STATE COLLEGE ENROLLMENT

1976 - 1988





SUMMARY

From 1980 to 1986 New Jersey experienced a smaller decline in the traditional college-age population than did the nation as a whole, yet it had a decline in college enrollment which the nation did not experience.

In New Jersey's state colleges, enrollments declined sharply between 1980 and 1986; in public four-year colleges nationally, however, enrollments increased during the same period.

Enrollment trends in New Jersey's public institutions of higher education fall into three distinct patterns: Rutgers/NJIT, the state colleges, and the community colleges. The demographic trends affecting all of these institutions, however, were the same.

The divergence between the enrollment patterns in New Jersey and those in the nation cannot be explained by demographic trends. Nor can the existence of three separate enrollment patterns in New Jersey's public sector be explained by demographics.

A reasonable question, then, is: If the divergent enrollment trends cannot be explained by demographics, what is the explanation? How are the New Jersey enrollment trends affected by state higher education policies?

ACCESS

The Chancellor's Five-Year Agenda sets forth major policy goals for higher education. This and subsequent sections of the report offer initial assessments of progress being made toward achieving those goals for which objective measurement is possible.

The ambitious goal of providing the "highest quality higher education to every citizen who chooses to pursue it" has top priority on Chancellor Hollander's *Agenda*.

This and many other statements in the document clearly express the principle that access to academic programs which are not of high quality is of little value. Both access and excellence are essential.

One step toward finding an objective measure of the performance of New Jersey in achieving access is to compare the college-going rates of the people in different age groups in the state with the national averages.

The Enrollment Gap

Taking the actual age distribution of the New Jersey population and multiplying the New Jersey population base by national average college-going rates yields a calculated potential student enrollment of 381,000 in the state's colleges and universities in 1985. In fact, there were only 298,000.

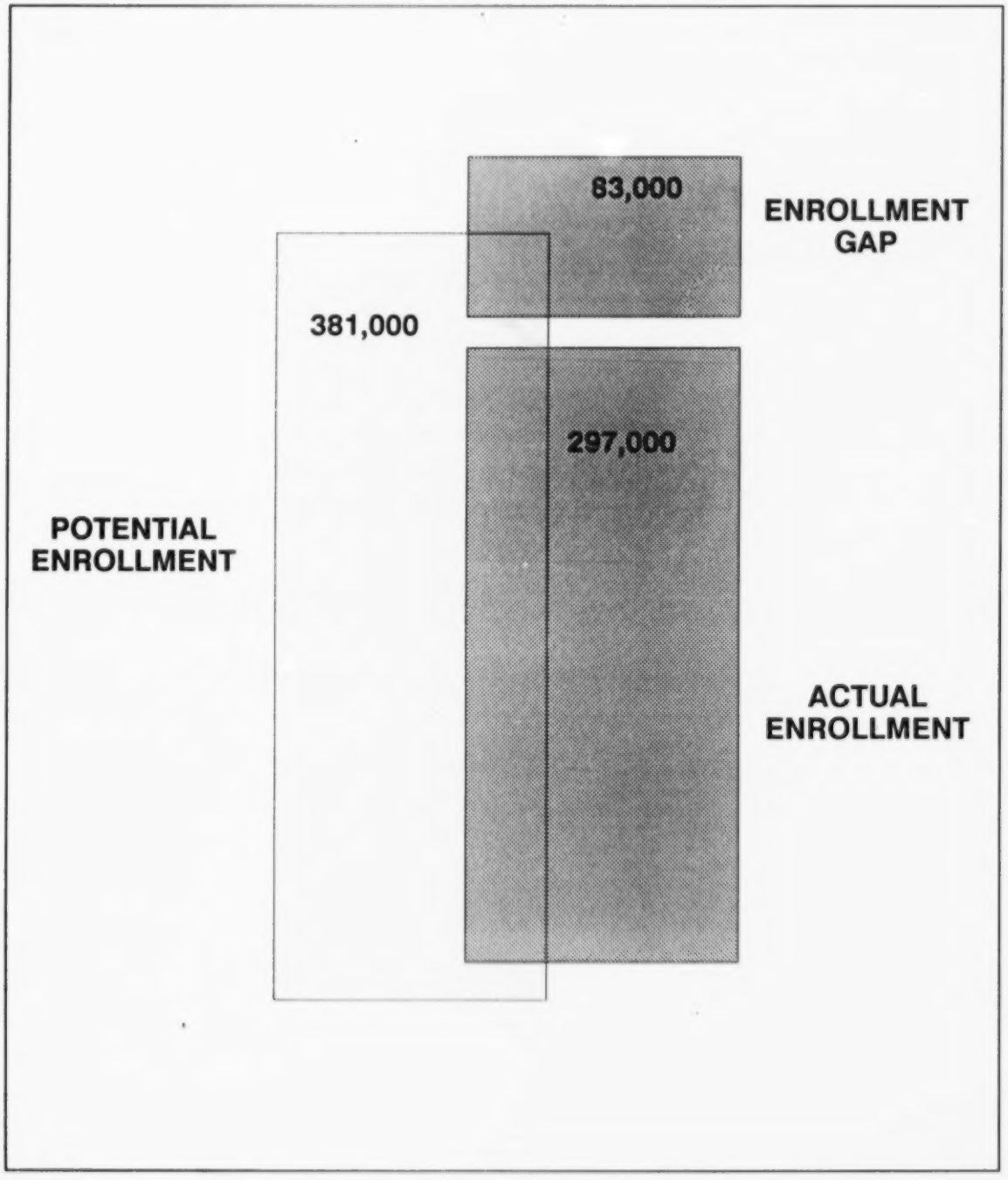
The gap of 83,000 students, or 28 percent, between the calculated potential enrollment in college in New Jersey and the actual enrollment is illustrated in Exhibit IV-1. About half of the gap arises because students leave the state to seek education in other states. The other half of the gap arises because a smaller percentage of the people in New Jersey go to college anywhere.

Turning our attention to the public sector, the number of students enrolled in public colleges per 1,000 population in New Jersey is among the lowest in the nation.

The gap between potential and actual college enrollment in New Jersey reflects a gap between the stated education policy objective of providing educational opportunities and the state's actual performance in enabling potential students to avail themselves of those opportunities. The existence of these gaps calls for re-examination of the policies which contribute to them.

Exhibit IV-1

GAP BETWEEN ACTUAL AND POTENTIAL COLLEGE ENROLLMENT IN NEW JERSEY IN 1985



EQUITY

To become among the best and most equitable higher education systems in the country is a stated goal in the Chancellor's *Agenda*. Progress toward the goal of equity in higher education might be measured by increases in the enrollment of under-represented groups, identified by such characteristics as family income or race.

Data recently published by the federal statistical agencies indicates that significant increases in the enrollment of African-American students were achieved nationally in the 1970's but that progress slowed and was even reversed in the 1980's.

New Jersey achieved better than the national average increases in African-American enrollments in the 1970's but then slipped to worse than the national average decreases in the 1980's. After the reversal, New Jersey ranked among the bottom ten states in performance in the four-year institutions, as shown on in Exhibit IV-3.

The fact that African-American student enrollment in New Jersey is not only decreasing, but decreasing more than in most other states, is relevant to the policy question: Is the state's poor performance in this area a consequence of policy decisions or the result of factors outside policymakers' control?

Exhibit IV-2

NEW JERSEY MINORITY ENROLLMENT

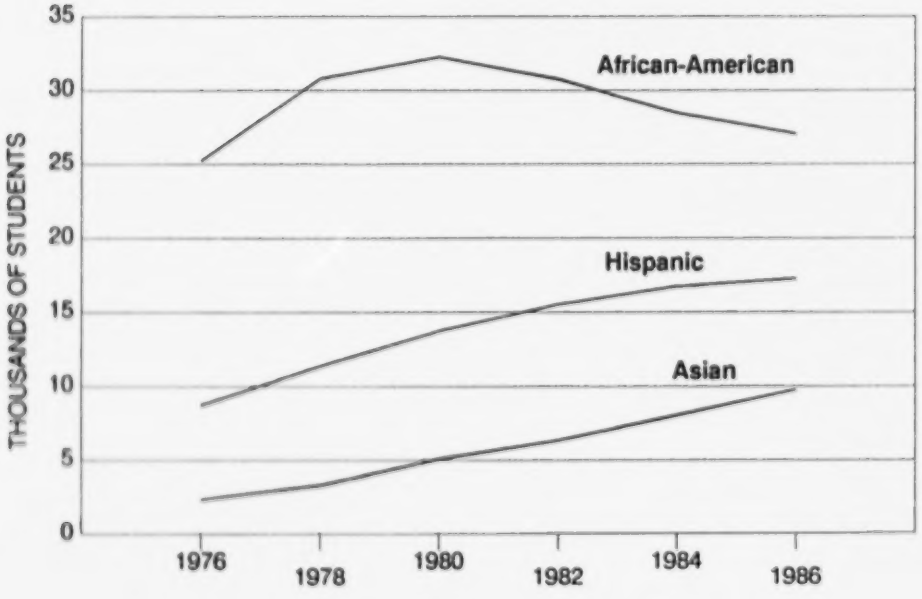
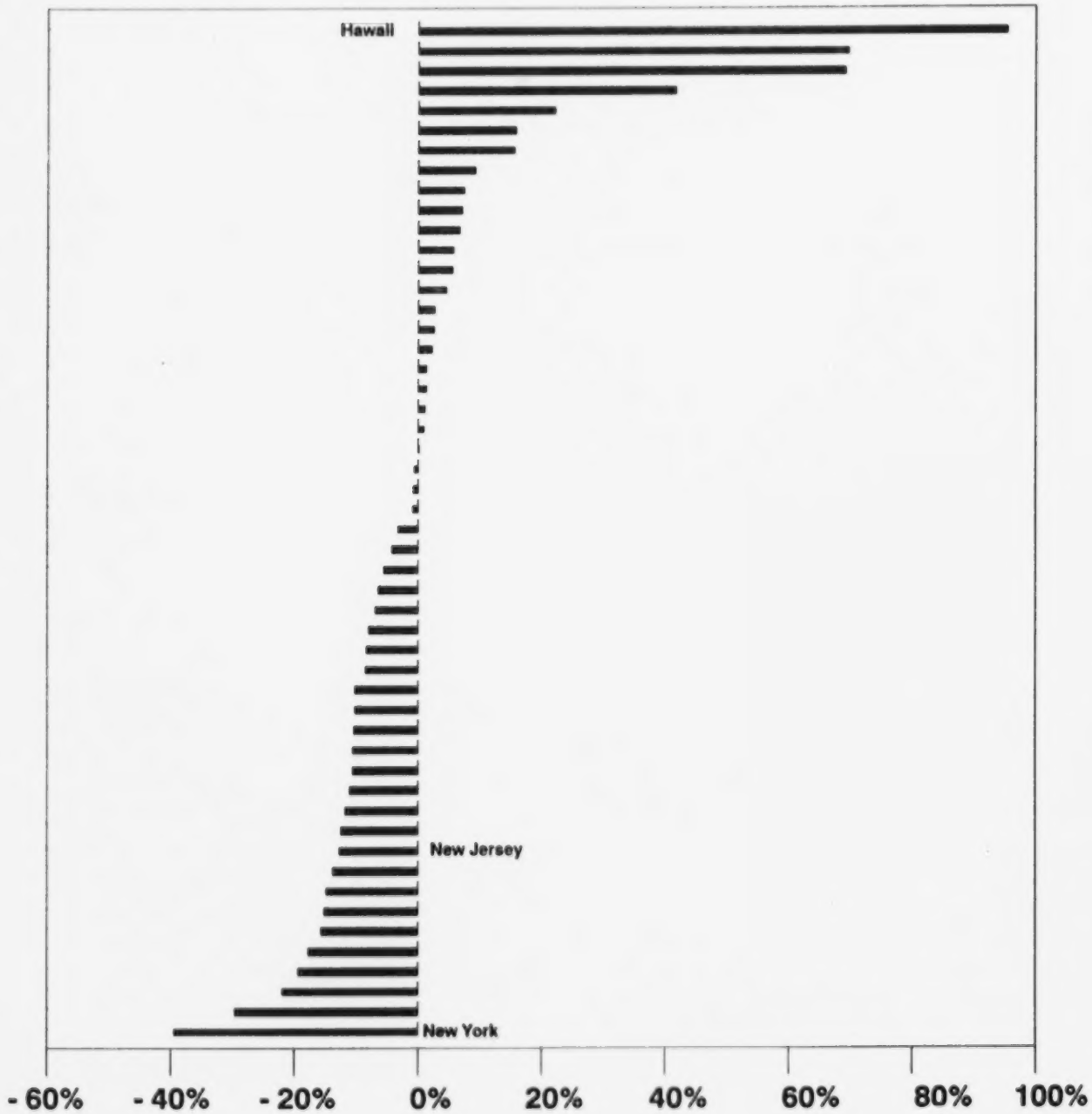


Exhibit IV-3

TRENDS IN AFRICAN-AMERICAN ENROLLMENT FOUR-YEAR PUBLIC INSTITUTIONS

STATES RANKED BY PERCENTAGE CHANGE

1980-81 TO 1984-85



AFFORDABILITY

The Chancellor's *Agenda* sets forth the goal of keeping New Jersey public colleges affordable. Affordability complements the related goals of access and equity. It is particularly important in the state colleges, which are the traditional entry-level institutions for children of working parents.

Tuitions in New Jersey's public four-year institutions are comparatively high, however, ranking seventh highest in the nation in the 1986-87 academic year, as shown on Exhibit IV-4. Two of the ten most expensive state colleges in the nation are reported by the *Chronicle of Higher Education* to be New Jersey state colleges.

Tuitions in New Jersey's public four-year institutions ranked seventh highest in the nation in the 1986-87 academic year.

Even higher tuition may be in store for the future. BHE policy states that undergraduate tuition levels for New Jersey residents should be set at approximately 30 per cent of average educational costs per student in public institutions. Because of the sustained enrollment declines in the state colleges since the mid-1970s, costs per student have increased markedly in these institutions, and tuitions, high as they are, have not kept up. In FY 1987-1988, state college tuition could have been 20 per cent higher than it was and still fallen within the 30 per cent guideline.

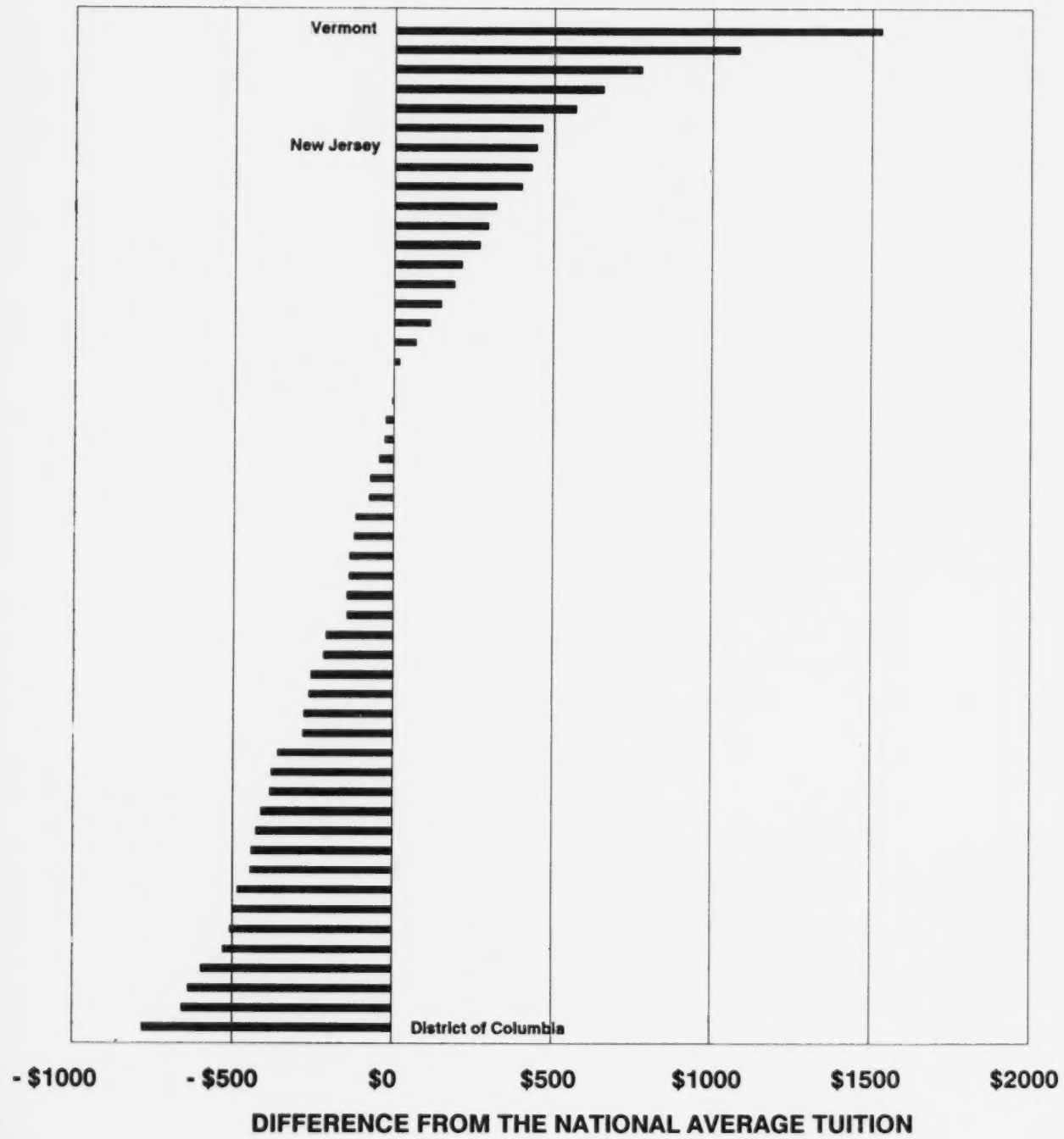
We anticipate that the 1988 *Jobs, Education, and Competitiveness* bond issue, which requires recipient institutions to supply matching funds, will generate additional pressure to raise tuitions. The state colleges, with limited ability to attract private donations, will have to raise most of their matching funds from tuition increases.

The policy decision to force students, for the first time in New Jersey's history, to finance capital construction of academic facilities with tuition increases appears inconsistent with the stated goal of affordability.

Exhibit IV-4

AVERAGE IN-STATE UNDERGRADUATE TUITION AND FEES IN PUBLIC FOUR-YEAR COLLEGES

1986 - 1987



AVAILABILITY OF FINANCIAL AID

Student financial aid plays an important part in keeping college affordable.

Student aid is paying a smaller proportion of college expenses for New Jersey full-time undergraduates than in the past, and correspondingly more of the burden is falling on the students and their families.

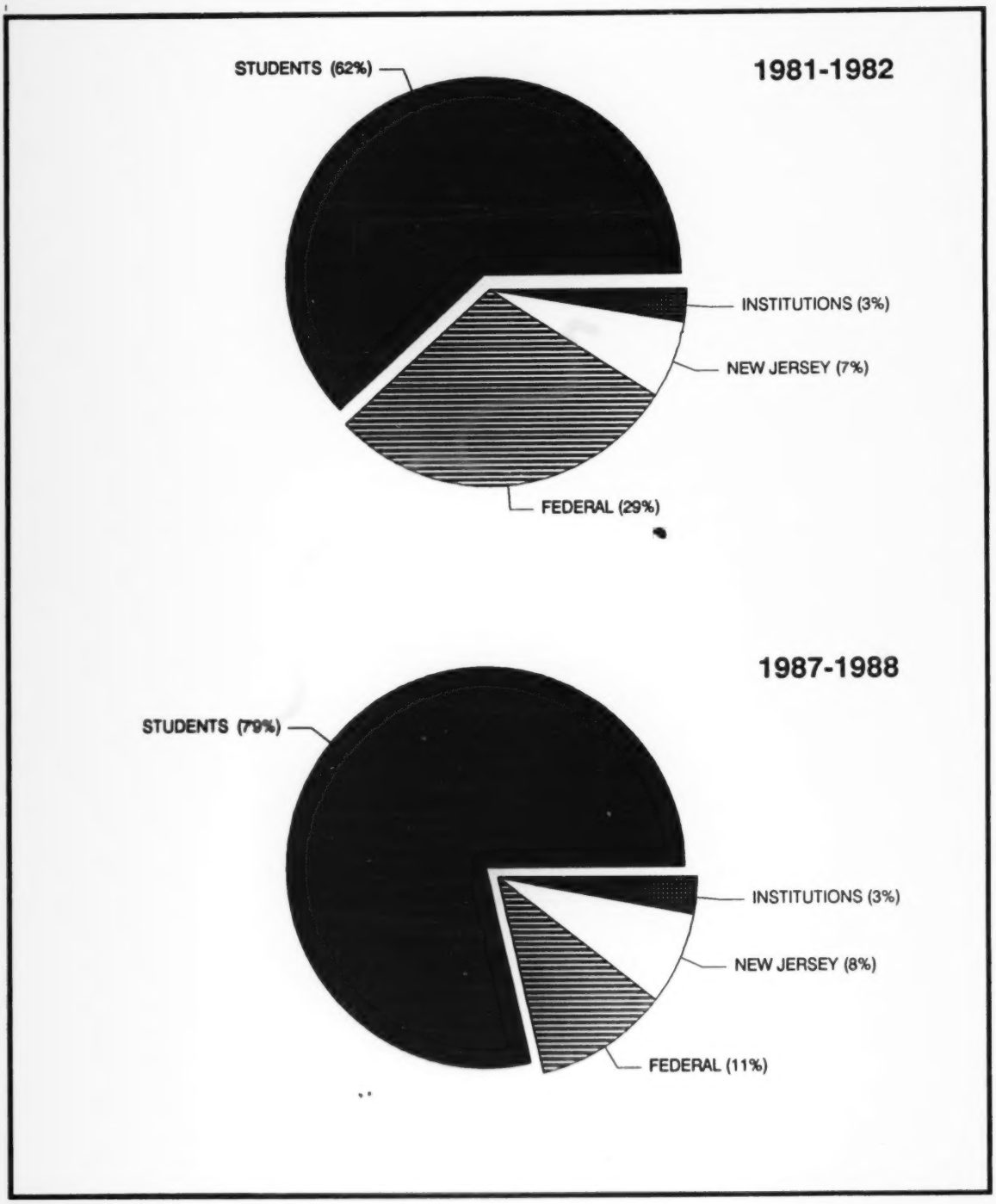
Data provided by the DHE (Exhibit IV-5) show that in 1981-1982, 29% of college expenses of New Jersey's full-time undergraduates were paid by federal student aid. By 1987-1988, this percentage had shrunk to 11%. The percentage of college expenses paid by the students and their families increased from 61% to 78% during the same period. New Jersey grants replaced very little of the deficit created by the diminishing Federal commitment.

New Jersey college students and their families have been forced to assume a significantly larger proportion of college expenses over the last few years.

Exhibit IV-5

SOURCES OF FUNDS FOR COLLEGE EXPENSES FOR NEW JERSEY FULL-TIME UNDERGRADUATES

1981-1982 AND 1987-1988



IMPROVED PHYSICAL FACILITIES

In proposing the 1988 "Jobs, Education and Competitiveness" bond issue, the Board of Higher Education acknowledged a significant need for improved physical facilities in the New Jersey state colleges.

New construction needs of $1.1 billion have been identified in New Jersey's public higher education institutions. Except for revenue-producing dormitories, student centers, and similar projects, there has been no major capital construction in the state colleges in 15 years. The last general purpose bond issue for higher education in New Jersey was in 1971.

There are almost twice as many New Jersey students per 10,000 square feet of floor space as the national average for comparable institutions, according to data provided to the Board of Higher Education in connection with the bond issue.

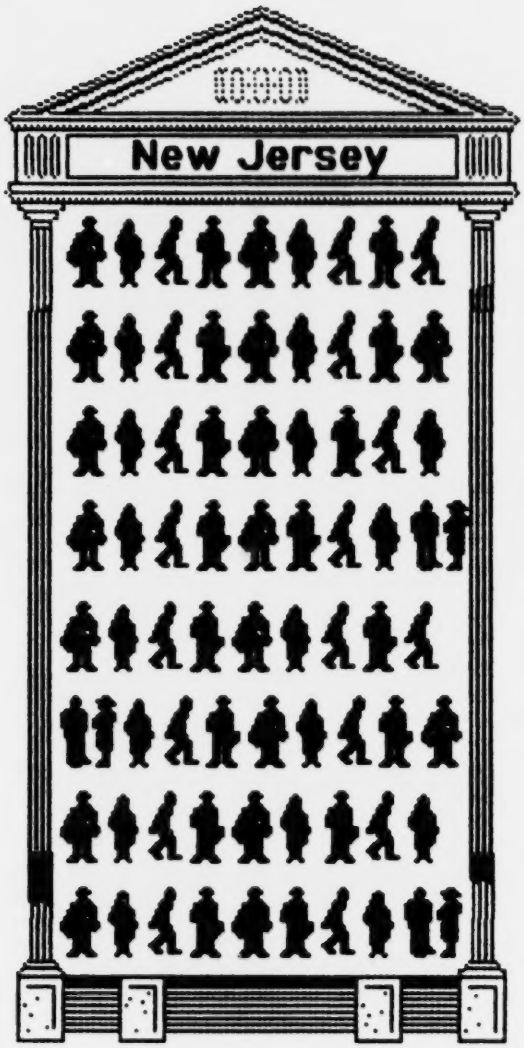
There are almost twice as many New Jersey students per 10,000 square feet of floor space as the national average for comparable institutions.

Even after the construction financed by the bond issue is complete, New Jersey will fall below national norms. Rutgers and the state colleges will have only 70% of the national average gross square footage per full time equivalent student.

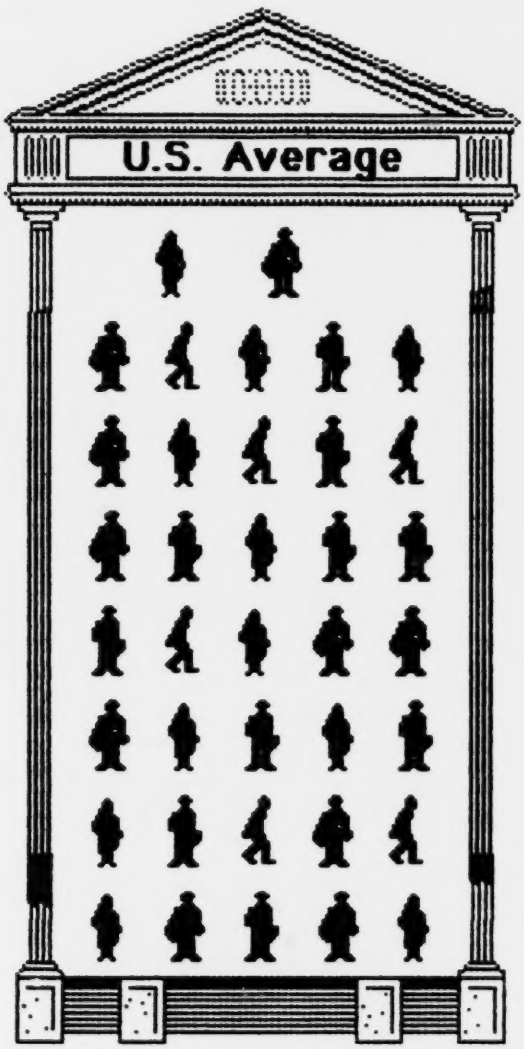
The 1988 capital bond issue, moreover, requires institutional matching funds that, at least in the state colleges, will have to be raised in large measure by increasing tuition. This will shift to current and future students the burden of making up for past capital underfunding, thereby undercutting the goals of affordability and access.

Exhibit IV-6

NEW JERSEY STATE COLLEGE PHYSICAL PLANT
1986



75 FTE STUDENTS
PER 10,000 SQUARE FEET



37 FTE STUDENTS
PER 10,000 SQUARE FEET

IMPROVING QUALITY

In his *Five-Year Agenda*, the Chancellor makes a major commitment to improving the quality of higher education in the state of New Jersey.

"Quality" is not susceptible to direct quantitative measurement. Certain factors are ordinarily associated with quality in undergraduate institutions, however.

The October, 1988, draft of the DHE policy paper, "Improving Undergraduate Education," sets forth some of these factors under the heading "excellence" (pp.8-9). They include good physical facilities; a high percentage of faculty with doctoral degrees and strength in research, scholarship and creative expression as well as a strong interest in teaching undergraduates; a low faculty/student ratio; and a strong academic advising system. The paper states that:

> Students should have enough small classes and seminars to facilitate easy interaction with faculty and peers... [U]ndergraduate research, scholarship and creative expression should be encouraged . . . Undergraduates should have easy access to strong library collections and excellent science and computer laboratories.
>
> [U]ndergraduates should have access to a large array of cocurricular and intramural sports activities. The institution should provide an extensive set of intellectual and cultural events on campus.

Building and maintaining a strong faculty, a high faculty/student ratio, strong library collections, excellent science and computer laboratories, fine academic and residential facilities and a comprehensive network of support services require **money**. While adequate funding may not be sufficient to provide these things, it is certainly necessary to secure them.

A full discussion of funding for public higher education, however, is conspicuously missing from the Chancellor's *Agenda*.

Funding: Comparison With Other States

Inter-state comparisons of state support for higher education are complex because of differences among the states in such factors as the age distribution of their populations; the mix of institutions in the state among public and private, four-year and two-year sectors; and the division of responsibilities between state and local governments. Differences in budgeting and accounting formats and reporting practices also add complexity to comparisons among states.

Nevertheless, the state comparisons may be helpful, if not in providing answers, at least in asking questions about the objectives and the results of alternative state higher education financing policies.

New Jersey has a history of allocating a smaller share of its state budget to higher education than most other states. New Jersey ranked 47th in 1985-86 and 43rd in 1987-88 among the 50 states and the District of Columbia in the percentage of state and local tax revenues allocated to public higher education.

New Jersey is near the national average in per student appropriations for public higher education, but ranks very low in total dollars of support for, and in the share of total tax revenues devoted to, this sector. The reason is that college enrollments in New Jersey are low.

Some other high-income states also rank low in state dollars for higher education, but most of them have a larger percentage of college students at private institutions than does New Jersey. Pennsylvania, for instance, ranks 40th, and New York ranks 44th, but more than 40 percent of the college enrollment in both states is in private institutions, compared with only 20 percent in New Jersey.

Comparisons With The Past: Funding of the State Colleges

Trends in the funding of the state college sector over the last several years are especially surprising when stated higher education goals are considered.

As a percent of the total New Jersey budget, appropriations for the state colleges peaked in the mid-1970's and have declined most of the years since. The declining budget share is shown in Exhibit IV-7. State support for the state colleges as a percent of New Jersey personal income currently falls significantly below levels reached in the 1970's, as shown on Exhibit IV-8.

In current dollars, state support for the state colleges has increased steadily in recent years. Because of inflation, however, real support in constant dollars declined between FY 1978 and FY 1983 and did not recover to the FY 1978 peak level until FY 1986, as shown in Exhibit IV-9.

Consistent with a lack of significant budget growth and the declining enrollments in the state colleges, the number of positions budgeted for instruction in these institutions declined from 3,630 in FY 1976 to 3,160 in FY 1989. These trends are compared in Figure IV-10 with those at Rutgers, where the number of budgeted positions in instruction has steadily increased over the years.

In the mid-1970's total expenditures per student in the state college system (excluding funds appropriated separately for pensions and debt service) was about equal to the total expenditures per pupil in the K-12 school system (including pensions and debt service).

While the two sets of numbers are not entirely comparable, looking at the relationship between them over time is meaningful. It appears that over the last ten years the relationship between per-pupil expenditures in the public schools and per-student expenditures in the state colleges changed to the detriment of the state colleges. By 1980, total expenditures per student in the state college system had slipped below per-student expenditures in the elementary and secondary schools and until recently continued to decline in comparison.

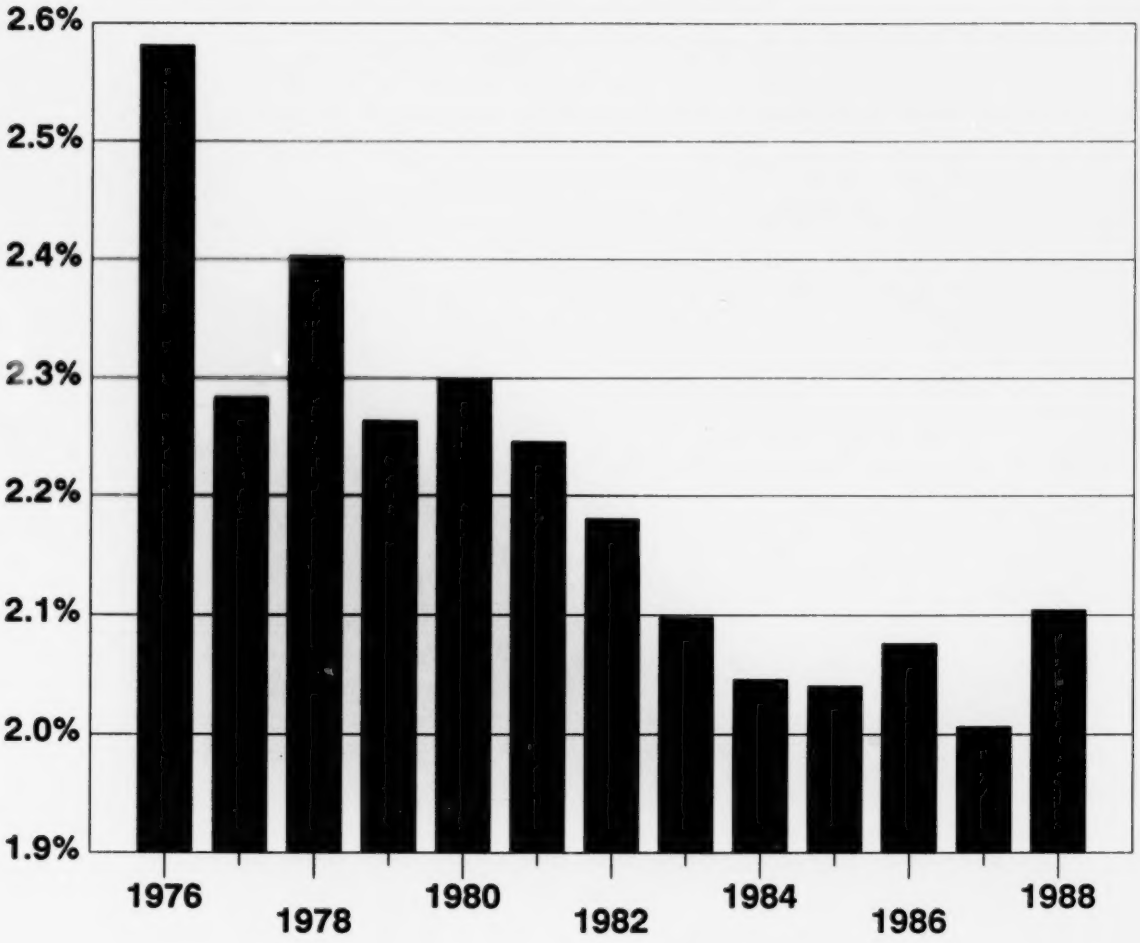
The trends in New Jersey state appropriations per student for the state colleges and the K-12 system are shown on Exhibit IV-11.

It is hard to reconcile these enrollment, budget, and staffing trends with the statement in the October, 1988 draft of the BHE policy paper "Improving Undergraduate Education," that "Students in our New Jersey public colleges in particular should receive the same richness of quality in their educational experience that is offered by those selective liberal arts colleges considered to be first-rate."

Exhibit IV-7

STATE SUPPORT FOR THE STATE COLLEGES AS A PERCENT OF THE TOTAL NEW JERSEY STATE BUDGET

1976 - 1988

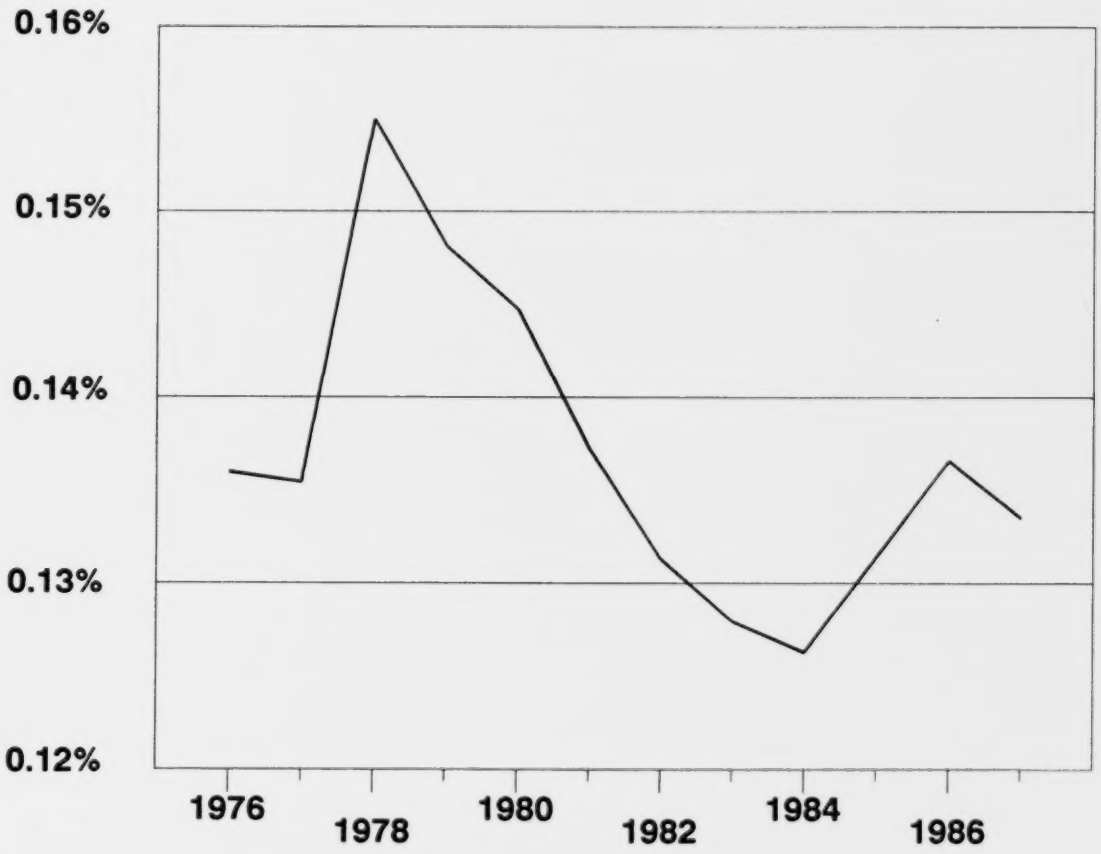


In the last twelve years, the proportion of New Jersey's budget devoted to the state colleges has declined significantly.

Exhibit IV-8

STATE SUPPORT FOR THE STATE COLLEGES AS A PERCENT OF NEW JERSEY PERSONAL INCOME

1976 - 1987

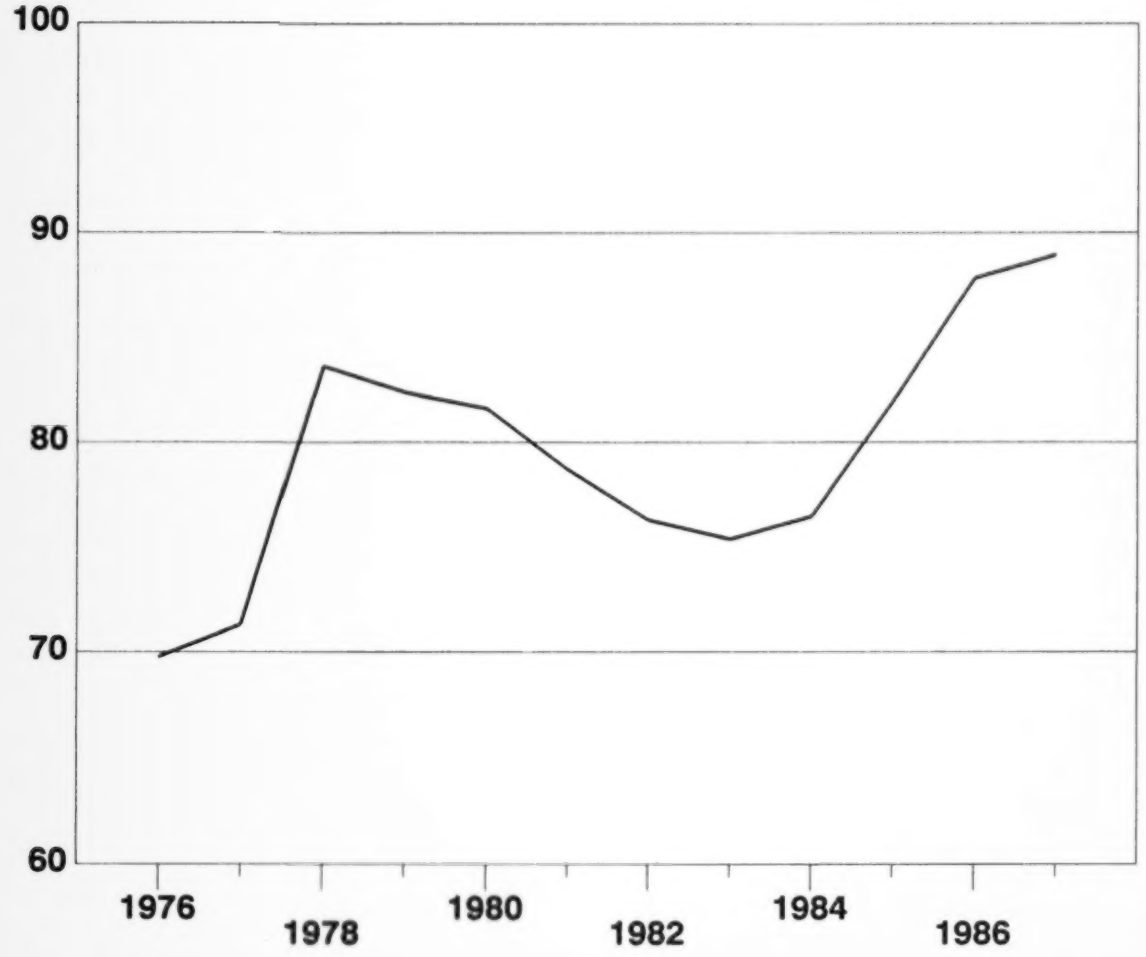


The percentage of New Jersey's personal income spent on the state colleges peaked in 1978 and declined steadily between 1978 and 1984. Since 1984, appropriations for the state colleges have risen, but still lag behind 1978 levels when compared to personal income.

Exhibit IV-9

STATE SUPPORT FOR THE STATE COLLEGES IN MILLIONS OF CONSTANT 1976 DOLLARS

1976 - 1987

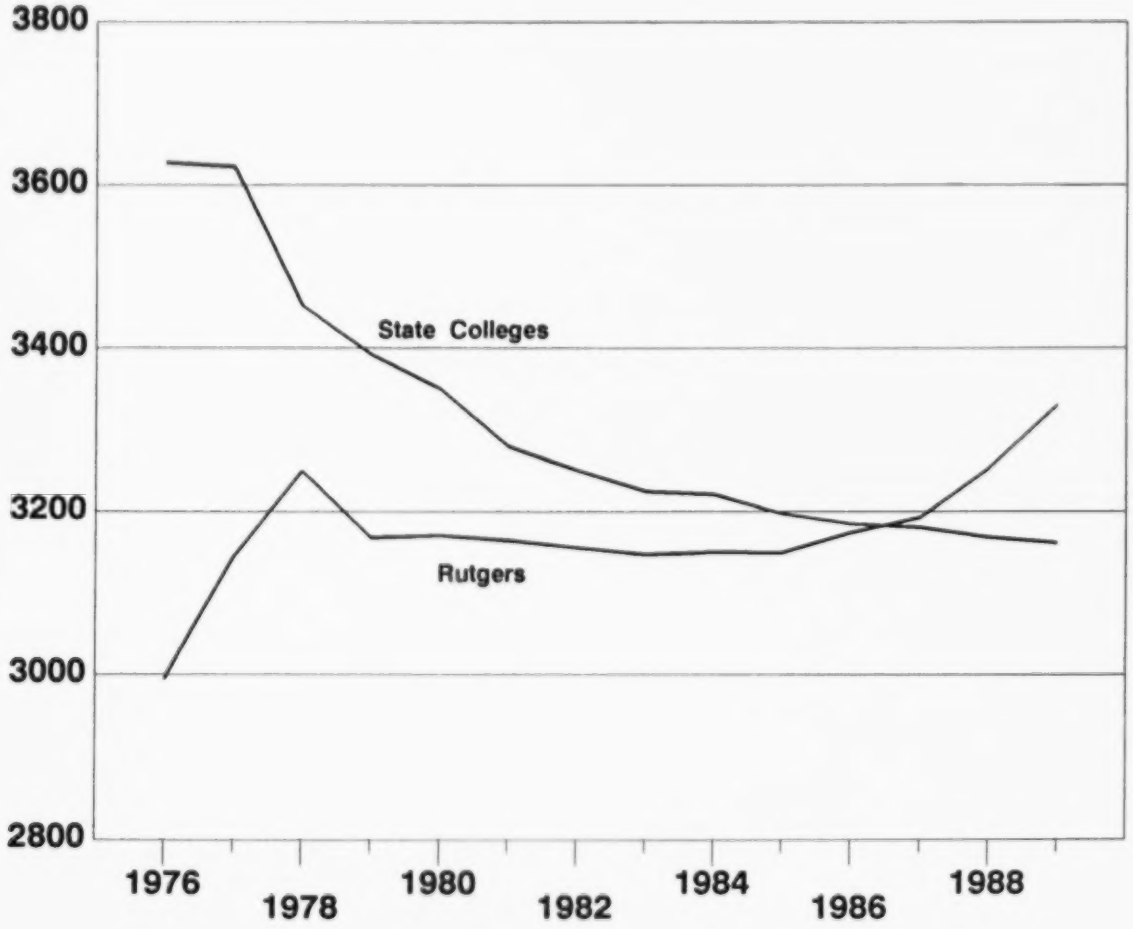


Appropriations for the state colleges have increased every year since 1976. If the figures are corrected for inflation, however, appropriations actually declined by 10% between 1978 and 1983 and did not recover to 1978 levels until 1986.

Exhibit IV-10

BUDGETED POSITIONS (INSTRUCTION) IN THE NEW JERSEY STATE COLLEGES AND RUTGERS, THE STATE UNIVERSITY

1976 - 1989

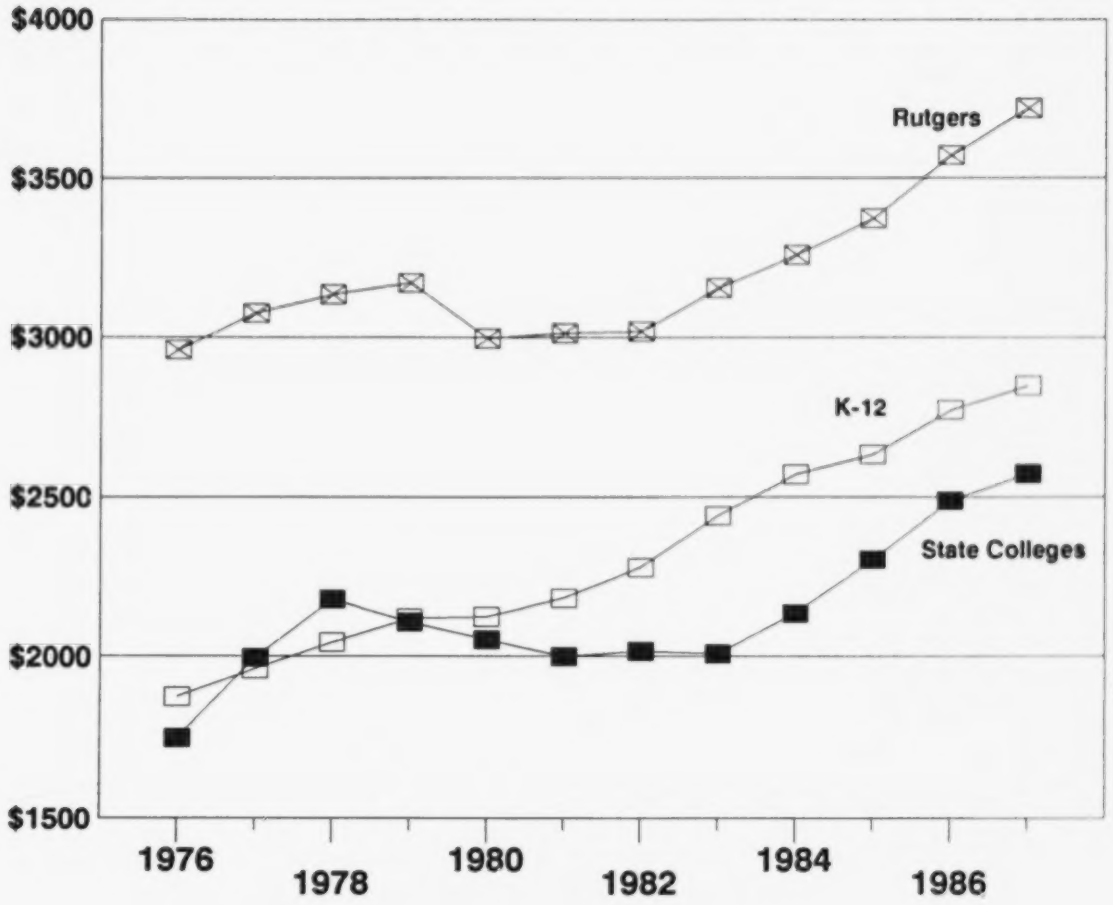


The number of budgeted positions in instruction at the state colleges has declined steadily since 1976. In contrast, the number of budgeted positions at Rutgers increased by 10% during the same period.

Exhibit IV-11

EXPENDITURES PER STUDENT IN THE STATE COLLEGES, RUTGERS, AND K-12 (CONSTANT 1976 DOLLARS)

1976 - 1988



Per-student expenditures in the state colleges have increased less since the late 1970's than per-student expenditures in the elementary and secondary schools.

INCREASED AUTONOMY

Institutional "autonomy" has long been a stated goal of the Board of Higher Education. At the behest of the Chancellor and the BHE, the Legislature in 1985 increased the formal fiscal authority of the individual state college boards of trustees and removed state college faculty from the jurisdiction of the Civil Service Commission (Department of Personnel).

At the same time, however, the BHE's control over budgets and academic programs was retained, and, in certain respects, increased.

Implementation of many of the initiatives in the Chancellor's *Five-Year Agenda* and the associated BHE policy papers involves channelling funds to the Department of Higher Education for redistribution to the various higher educational institutions in New Jersey, public and private. The institutions apply for the funds under specific programs. Guidelines for applications are devised and administered by the the Department, and it is the Department which determines which applications are successful.

This strategy contrasts with the alternative of appropriating funds directly to the institutions. It has led to extremely large increases in the DHE management and administrative services budget, which includes support services to institutions.

Up to the early 1980s, the New Jersey Department of Higher Education had a management and administrative services budget that was comparatively small in relationship to the funds appropriated directly to the institutions. Since then, however, dramatic increases brought the Department's management and administrative services budget up to a level comparable to the budget of a typical state college.

In fiscal year 1981, $3.2 million was expended for management and administrative services. But for FY 1988, the expenditure was $35.4 million – a ten-fold increase, and a figure larger than the state support for eight of the nine state colleges.

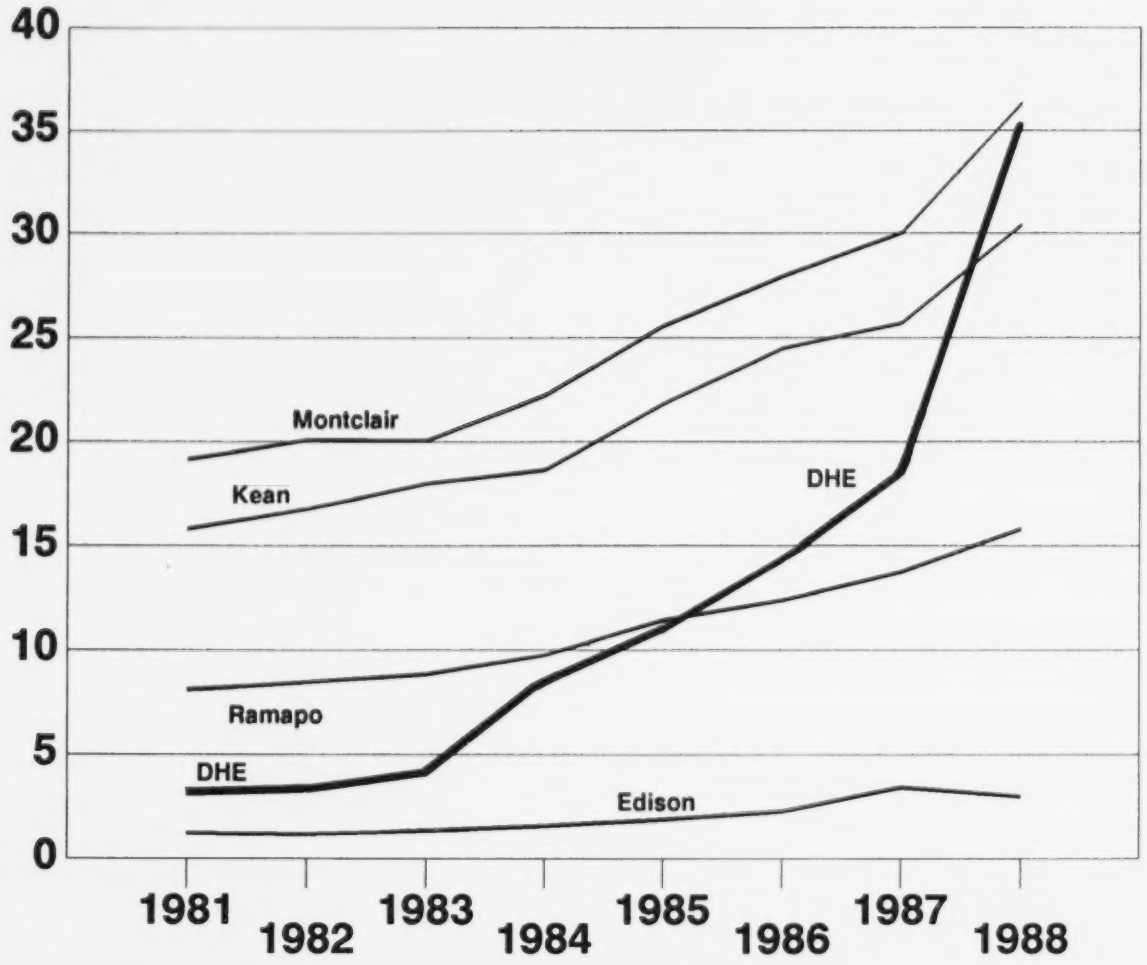
The management and administrative services budget of the New Jersey Department of Higher Education since 1981 is presented in Exhibit IV-12. The DHE management and administrative services adjusted appropriation for FY 1989 is compared with the adjusted appropriations for the nine state colleges in Exhibit IV-13.

Exhibit IV-12

THE DHE MANAGEMENT AND ADMINISTRATIVE SERVICES BUDGET COMPARED WITH STATE SUPPORT FOR THE STATE COLLEGES

1981 - 1988

(MILLIONS OF DOLLARS)

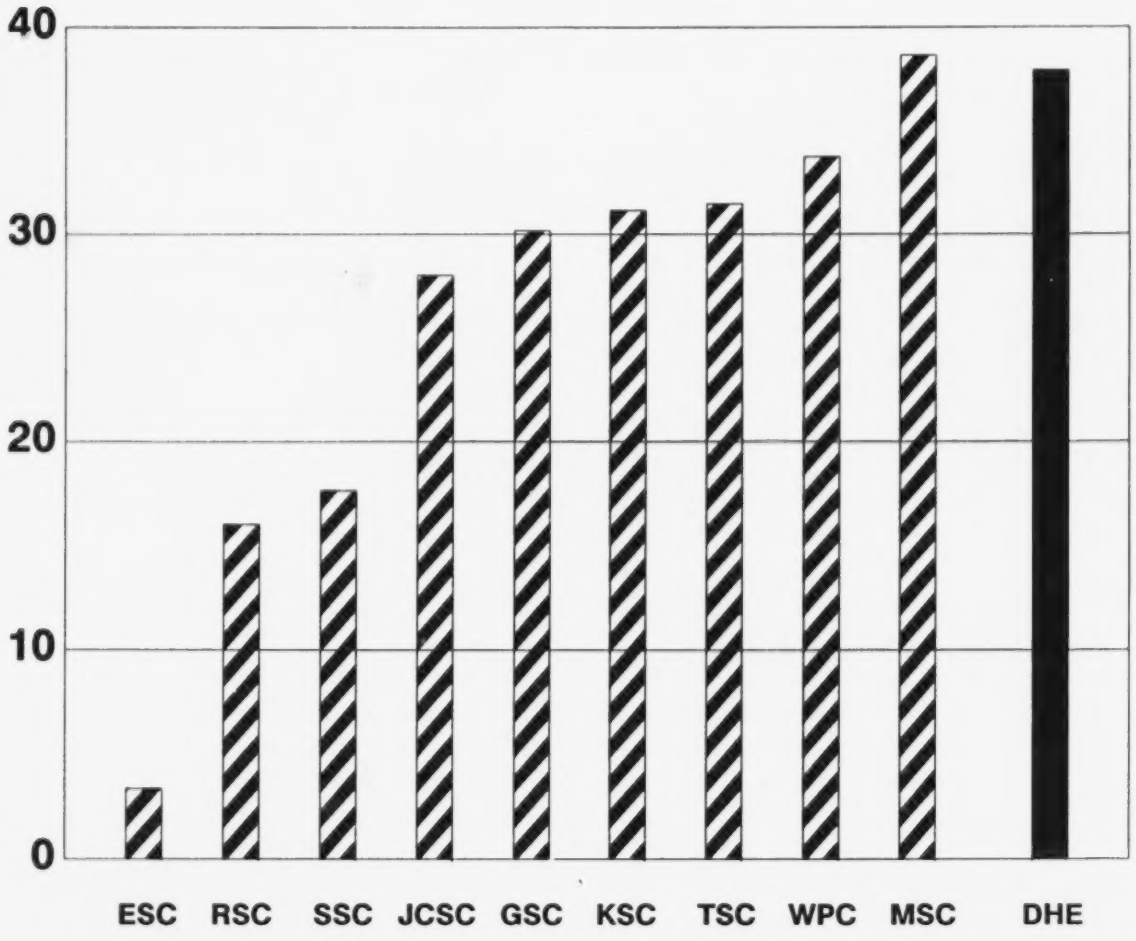


The Management and Administrative Services budget of the Department of Higher Education has increased by nearly tenfold since 1981.

Exhibit IV-13

THE DHE MANAGEMENT AND ADMINISTRATIVE SERVICES BUDGET COMPARED WITH STATE SUPPORT FOR THE STATE COLLEGES

ADJUSTED APPROPRIATIONS - FY 1989
(MILLIONS OF DOLLARS)



In FY 1989, the adjusted appropriation for Management and Administrative Services in the Department of Higher Education was larger than state support for any state college except Montclair.

CONCLUSIONS

We have examined the stated goals, the planning model, the demographic trends and the enrollment projections in Chancellor T. Edward Hollander's Five Year Agenda, which the New Jersey Department of Higher Education is using to prepare for the future. We conclude that:

- **The Chancellor's planning model is too narrow, because it does not take into adequate account the impact on current and future college enrollment of the students over the traditional college age.**

- **College enrollments in New Jersey declined in the first half of the 1980's, while they held even or increased in most other states. The enrollment decline in New Jersey occurred despite a college-age population which was relatively stable compared with the declines experienced in other states.**

- **There is a significant gap in New Jersey between actual and potential college enrollment. If college-going rates in New Jersey were equal to the national average for each age-group, there would have been 83,000 more students enrolled in colleges in New Jersey in 1985 than there actually were. One-third to one-half of these 83,000 students go out-of-state to college; the rest are not enrolled in college at all.**

- **The Chancellor's Agenda describes the task at hand as, essentially, the management of the decline in college enrollment. Even the demographic data, however, suggests that college enrollments, after dipping in the early 1990's, are likely to be nearly as high in 2000 as they are in 1989. In addition, there appears to be a large pool of potential students which could be tapped, were the requisite policy decisions made to do so. Thus, the real task is surely not MANAGEMENT OF DECLINE, but BUILDING A BRIDGE TO THE FUTURE.**

- **The Chancellor's Agenda sets out policy goals in several areas, including quality, access and equity, affordability, and improved physical facilities. There are gaps between aspirations and progress so far in achieving these goals.**

- **While the Chancellor and the Board of Higher Education publicly advocate greater decentralization and autonomy, a sharply increasing proportion of New Jersey's higher education budget is being channelled through the Department of Higher Education for centralized program initiatives.**

- **The Chancellor's Agenda contains no discussion of how much the desired educational improvements will cost or how they will be financed. The adverse impact of current fiscal policies on the state's ability to achieve stated higher education goals is not addressed in the Chancellor's Agenda or other BHE policy papers.**

- **The Chancellor's planning model and planning premises are not adequate to the task of preparing for the 1990's. A more comprehensive approach is needed. In the first place, the effect of current policies on enrollments should be examined. Fiscal assumptions should be made explicit; the difficult tradeoffs between educational quality and fiscal constraints should be discussed. Alternative policies should be openly debated.**

In developing higher education policies and plans for the 1990's, the most basic questions should be addressed: Are current policies in the best interests of all the people of New Jersey? Aren't new policies needed?

APPENDIX

The data on which this report is based are presented in the tables on the following pages.

Exhibits II-1 and II-2. NEW JERSEY POPULATION PROJECTIONS, BY AGE (THOUSANDS)

Age	1970	1975	1980	1985	1986	1990	1995	2000	2005
15-19			671		596	509	498	556	601
20-24			615		628	558	477	468	520
25-29			574		612	664	595	520	509
30-34			564		621	670	724	650	574
35-39			480		600	631	700	747	670
40-44			400		498	582	640	710	752
45-49			394		412	484	578	637	706
50-54			433		383	398	478	572	631
55-59			430		417	375	384	462	554
60-64			368		402	391	351	361	434
15-24	1,122	1,256	1,286	1,237	1,224	1,067	975	1,024	1,121
25-34	867	1,024	1,138		1,233	1,334	1,319	1,170	1,083
35-64	2,493	2,480	2,505		2,712	2,861	3,131	3,489	3,747

Exhibit II-3. SAMPLE CALCULATION OF NET IMPACT ON NEW JERSEY COLLEGE ENROLLMENT OF PROJECTED POPULATION TRENDS BY AGE GROUP, 1980-2000 (POPULATION AND HEAD COUNT ENROLLMENT FIGURES IN THOUSANDS)

	Age Group			
	15-24	25-34	35-64	Total
1. 1980 NJ Population (Actual)	1,286	1,138	2,505	
2. 2000 NJ Population (Projected)	1,024	1,170	3,489	
3. NJ Population Change, 1980-2000 (Line 1-Line 2)	-262	+32	+984	
4. 1985 US Total College Enrollment	7,151	3,214	1,885	
5. 1985 US Population	39,552	42,027	76,687	
6. 1985 US College-Going Rate (Line 4/Line 5)	0.181	0.077	0.025	
7. Estimated Change In NJ Enrollment 1980-2000 (Line 3 x Line 6)	-47	+2	+25	-20
8. Actual 1980 Head Count Enrollment				322
9. Estimated Percent Change in Head Count Enrollment 1980-2000				-6%

Sources: U.S. Department of Commerce, Bureau of the Census, Current Population Reports, Series P-25, No. 1017, Projections of the Population of the States, by Age, Sex, and Race: 1986 to 2010, p. 73 (1988); No. 1010, State Population and Household Estimates, With Age, Sex, and Components of Change: 1980-1986, p. 20 (1987); No. 998, State Population and Household Estimates to 1985, With Age and Components of Change (1986).

U.S. Department of Education, National Center for Education Statistics, Digest of Education Statistics 1988, pp. 143, 152.

Exhibit II-4. NET MIGRATION OF NEW STUDENTS TO ATTEND COLLEGE IN OTHER STATES IN 1986.

	Students Leaving State	Students Entering State	Net Migration Into State
California	21,025	36,527	15,502
Arizona	3,766	15,836	12,070
North Carolina	5,465	17,027	11,562
Massachusetts	16,885	28,431	11,546
District of Columbia	2,921	13,943	11,022
Alabama	4,051	9,658	5,607
Indiana	7,144	12,419	5,275
Texas	10,889	15,929	5,040
Rhode Island	3,505	8,485	4,980
Tennessee	6,064	10,470	4,406
Utah	2,208	6,325	4,117
Missouri	8,183	12,215	4,032
Pennsylvania	21,356	24,917	3,561
Vermont	2,204	4,779	2,575
Washington	7,393	9,837	2,444
Kansas	4,170	6,409	2,239
South Carolina	4,605	6,679	2,074
Wisconsin	7,769	9,648	1,879
Oregon	4,373	6,031	1,658
West Virginia	2,727	4,322	1,595
Louisiana	4,694	6,213	1,519
Iowa	6,498	7,802	1,304
Idaho	2,962	4,218	1,256
Georgia	9,106	10,339	1,233
Delaware	2,310	3,473	1,163
Mississippi	3,053	3,969	916
North Dakota	2,017	2,731	714
Kentucky	4,435	5,076	641
New Hampshire	4,613	5,073	460
Florida	15,935	16,223	288
South Dakota	2,172	1,939	(233)
Nebraska	3,433	3,165	(268)
New Mexico	2,881	2,555	(326)
Virginia	13,653	13,238	(415)
Arkansas	3,865	3,337	(528)
Wyoming	1,640	899	(741)
Hawaii	2,681	1,887	(794)
Maine	3,452	2,551	(901)
Nevada	2,139	1,017	(1,122)
Michigan	11,045	9,756	(1,289)
Montana	2,395	1,080	(1,315)
Oklahoma	4,126	2,572	(1,554)
Ohio	15,106	13,159	(1,947)
Minnesota	10,815	8,842	(1,973)
Alaska	2,851	317	(2,534)
Maryland	14,689	11,289	(3,400)
Illinois	24,595	19,118	(5,477)
Colorado (response low)	8,033	1,737	(6,296)
Connecticut	16,141	8,024	(8,117)
New York	38,493	30,262	(8,231)
New Jersey	35,859	7,147	(28,712)

Source: U.S. Department of Education, National Center for Education Statistics. Digest of Education Statistics 1988, CS 88-600, p. 166.

Exhibit III-1. TOTAL COLLEGE ENROLLMENT (HEAD COUNT, ALL SECTORS). STATES RANKED BY PERCENTAGE CHANGE BETWEEN 1980 AND 1986.

Rank	State	1980	1986	Percent Change
1	New Mexico	58,283	80,270	37.7
2	Alaska	21,296	27,482	29.0
3	Florida	411,891	477,210	15.9
4	Nevada	40,455	46,796	15.7
5	Wyoming	21,147	24,357	15.2
6	New Hampshire	46,794	53,876	15.1
7	Utah	93,987	106,217	13.0
8	North Carolina	287,537	322,966	12.3
9	Nebraska	89,488	100,401	12.2
10	Arizona	202,716	226,593	11.8
11	Texas	701,391	776,021	10.6
12	Iowa	140,449	155,369	10.6
13	Alabama	164,306	181,447	10.4
14	Virginia	280,504	308,318	9.9
15	Minnesota	206,691	226,556	9.6
16	Hawaii	47,181	51,697	9.6
17	North Dakota	34,069	37,311	9.5
18	Colorado	162,916	177,387	8.9
19	Pennsylvania	507,716	545,923	7.5
20	Louisiana	160,058	171,338	7.0
21	Maine	43,264	46,232	6.9
22	Illinois	644,245	686,895	6.6
23	Oklahoma	160,295	170,840	6.6
24	Ohio	489,145	520,486	6.4
25	Vermont	30,628	32,452	6.0
26	Georgia	184,159	195,123	6.0
27	Wisconsin	269,086	283,653	5.4
28	Idaho	43,018	45,260	5.2
29	Missouri	234,421	246,185	5.0
30	Kansas	136,605	143,203	4.8
31	Rhode Island	66,869	69,569	4.0
32	Maryland	225,526	233,492	3.5
	United States	12,096,895	12,500,798	3.3
33	Delaware	32,939	33,893	2.9
34	Arkansas	77,607	79,182	2.0
35	New York	992,237	1,006,000	1.4
36	South Carolina	132,476	134,116	1.2
37	Indiana	247,253	250,178	1.2
38	Kentucky	143,066	144,548	1.0
39	Michigan	520,131	520,423	0.1
40	Massachusetts	418,715	417,513	-0.2
41	Connecticut	159,632	158,278	-0.8
42	Mississippi	102,364	101,095	-1.2
43	Montana	35,177	34,691	-1.4
44	California	1,790,993	1,731,661	-3.3
45	Tennessee	204,581	197,070	-3.7
46	South Dakota	32,761	30,935	-5.6
47	West Virginia	81,973	76,783	-6.3
48	Oregon	157,458	144,798	-8.0
49	New Jersey	321,610	295,313	-8.2
50	District of Columbia	86,675	77,651	-10.4
51	Washington	303,603	242,443	-20.1

Source: U.S. Department of Education, Office of Educational Research and and Improvement, Digest of Education Statistics: 1988, CS 88-600, p. 152.

Exhibit III-2. NEW JERSEY AND UNITED STATES COMPARATIVE TRENDS: POPULATION AGE 18-24 AND COLLEGE ENROLLMENT, 1980-1986.

	1980	1986	Percent Change 1980-1986
New Jersey			
Population 18-24 (000)	872	864	-0.9
College Enrollment (000) (Total Head Count)	322	295	-8.4
United States			
Population 18-24 (000)	30,022	27,733	-7.6
College Enrollment (000) (Total Head Count)	12,097	12,501	+3.3

Sources: U.S. Bureau of the Census, Current Population Reports, State Population and Household Estimates with Age, Sex, and Components of Change: 1981 to 1987. Series P-25, Number 1024 (May, 1988), U.S. Government Printing Office, Washington, D.C.

U.S.Department of Education, Office of Educational Research and Improvement, Center for Education Statistics, Digest of Education Statistics, 1988, p. 152.

Exhibit III-3. NEW JERSEY ENROLLMENTS SINCE 1976, BY SECTOR

	Full Time Equivalent Enrollment				Index: 1976 = 100			
Year	State Colleges	NJIT	Rutgers	Community Colleges	State Colleges	NJIT	Rutgers	Community Colleges
1976	61,815	4,255	36,497	68,000	1.00	1.00	1.00	1.00
1977	54,551	4,159	37,326	67,400	0.88	0.98	1.02	0.99
1978	54,551	4,135	38,259	67,700	0.88	0.97	1.05	1.00
1979	54,281	4,164	39,458	69,200	0.88	0.98	1.08	1.02
1980	54,265	4,339	38,775	74,645	0.88	1.02	1.06	1.10
1981	53,800	4,549	38,086	76,941	0.87	1.07	1.04	1.13
1982	52,205	4,761	38,146	73,510	0.84	1.12	1.05	1.08
1983	51,554	5,102	37,615	74,392	0.83	1.20	1.03	1.09
1984	48,966	5,001	37,190	73,153	0.79	1.18	1.02	1.08
1985	46,870	5,109	37,081	68,395	0.76	1.20	1.02	1.01
1986	45,723	5,124	37,533	68,397	0.74	1.20	1.03	1.01
1987	44,256	5,220	37,638	64,841	0.72	1.23	1.03	0.95
1988	43,981	5,247	37,392	65,002	0.71	1.23	1.02	0.96

Sources: Annual New Jersey State Budgets and Board of Higher Education Budget Recommendations.

Exhibit III-4. NEW JERSEY STATE COLLEGE FULL TIME EQUIVALENT ENROLLMENTS SINCE 1976.

Year	Glass-boro	Jersey City	Kean	Pater-son	Mont-clair	Trenton	Ramapo	Stock-ton
1976	8,728	7,674	9,369	10,320	10,547	8,407	3,253	3,517
1977	7,554	6,236	7,947	8,482	9,909	7,817	3,214	3,392
1978	7,571	5,918	8,202	8,399	10,401	7,173	3,013	3,874
1979	7,426	6,167	8,433	8,266	10,161	7,085	2,858	3,885
1980	7,214	6,125	8,100	8,320	9,930	7,500	3,091	3,985
1981	7,029	6,025	8,116	8,125	10,244	7,170	3,188	3,903
1982	6,719	5,350	8,000	8,090	9,906	7,116	3,100	3,924
1983	6,545	5,124	7,895	7,975	9,706	7,080	3,181	4,048
1984	6,152	4,760	7,808	7,432	9,486	6,358	2,998	3,972
1985	5,930	4,721	7,652	6,554	9,270	6,242	2,737	3,764
1986	5,724	4,344	7,557	6,332	8,906	6,254	2,716	3,890
1987	5,875	4,072	7,510	6,334	8,252	5,773	2,394	4,046
1988	6,101	4,102	7,241	6,087	8,077	5,860	2,505	4,008

Source: Annual New Jersey State Budgets.

Exhibit IV-1. GAP BETWEEN ACTUAL AND POTENTIAL COLLEGE ENROLLMENT (HEAD COUNT) IN NEW JERSEY IN 1985.

	United States			New Jersey	
Age	Popu-lation (000)	Enroll-ment (000)	College-Going Rate	Popu-lation (000)	Calculated Enrollment (000)
15-17	11,052	235	.021	360	8
18-24	28,500	6,916	.243	877	213
25-34	42,027	3,214	.077	1,212	93
35-64	76,707	1,885	.025	2,678	67
New Jersey Calculated Potential Enrollment					381
New Jersey Actual College Enrollment					298

Source: Calculated from U.S. Department of Commerce, Bureau of the Census, State Population and Household Estimates, With Age, Sex, and Components of Change: 1981-1986, Series P-25, No. 1010, pp. 20, 64 (September, 1987)

Digest of Education Statistics 1988, pp. 143, 152.

Exhibit IV-2. NEW JERSEY MINORITY ENROLLMENT TRENDS BETWEEN 1976 AND 1986 (HEAD COUNT).

Year	Total	White Non-Hispanic	Black Non-Hispanic	Hispanic	Asian/ Pacific Islander	Native American	Non-Resident Alien
1976	253,284	212,888	25,217	8,698	2,320	581	3,580
1978	308,282	257,995	30,779	11,317	3,291	659	4,241
1980	321,610	na	32,235	13,750	5,075	943	na
1982	322,284	262,396	30,748	15,542	6,331	1,037	6,230
1984	305,330	243,768	28,473	16,773	8,005	891	7,420
1986	295,313	230,426	27,026	17,292	9,735	860	9,974
Percent Change:							
1976-80	+27.0		+27.8	+58.1	+118.8	+62.3	
1980-86	- 8.2		-16.2	+25.8	+ 91.8	- 8.8	
1976-86	+16.6	+8.2	+ 7.2	+98.8	+319.6	+48.0	+178.6

Sources: U.S. Department of Education, National Center for Education Statistics (1984 and 1986 data)

U.S. Department of Health, Education and Welfare, Office of Civil Rights, Racial, Ethnic and Sex Enrollment: Distribution for Institutions of Higher Education (1976, 1978, and 1982 data)

Exhibit IV-5. SOURCES OF FUNDS FOR COLLEGE EXPENSES FOR NEW JERSEY FULL-TIME UNDERGRADUATES IN 1981-82 AND 1987-88

	Millions of Dollars		Percent	
Source	1981-82	Estimate 1987-88	1981-82	Estimate 1987-88
Current Students and Families	360	692	62.1	78.6
Federal Student Aid	167	96	28.8	10.9
New Jersey Student Aid	38	67	6.6	7.6
Institutional Aid	15	25	2.6	2.8
Student Aid (All Sources)	220	188	37.9	21.4
Total Costs	580	880	100.0	100.0

Source: Chancellor's Report to the Board of Higher Education, 9/23/88

Exhibit IV-3. AFRICAN-AMERICAN ENROLLMENT: STATES RANKED BY PERCENTAGE CHANGE BETWEEN 1980-81 AND 1984-85.

State	Rank	Two-Year Colleges	State	Rank	Four-Year Colleges
Montana	1	600.0	Hawaii	1	95.4
Utah	2	142.7	Maine	2	69.7
Alaska	3	107.5	Alaska	3	69.2
North Dakota	4	104.8	North Dakota	4	41.7
Idaho	5	61.5	Nevada	5	22.2
Oregon	6	56.2	Louisiana	6	15.8
Kentucky	7	54.8	New Mexico	7	15.5
Arkansas	8	42.1	Montana	8	9.2
Minnesota	9	40.3	South Dakota	9	7.4
Kansas	10	37.2	Arizona	10	7.1
Hawaii	11	31.6	Michigan	11	6.6
Illinois	12	28.5	Minnesota	12	5.7
Wyoming	13	27.7	Nebraska	13	5.5
New Hampshire	14	25.0	Georgia	14	4.5
Texas	15	20.1	Idaho	15	2.6
Massachusetts	16	18.0	Texas	16	2.5
New Mexico	17	15.7	Oklahoma	17	2.2
Oklahoma	18	9.0	Delaware	18	1.3
Ohio	19	8.6	Wyoming	19	1.3
Nebraska	20	7.6	Kansas	20	1.0
Arizona	21	7.4	Virginia	21	0.9
Pennsylvania	22	5.1	North Carolina	22	0.2
Mississippi	23	4.6	Alabama	23	-0.6
Colorado	24	3.4	South Carolina	24	-0.8
Georgia	25	2.8	Florida	25	-0.9
Maryland	26	1.7	Maryland	26	-3.2
Vermont	27	0.0	Washington	27	-4.2
North Carolina	28	-1.7	West Virginia	28	-5.5
Connecticut	29	-1.9	Massachusetts	29	-6.5
Wisconsin	30	-2.3	Illinois	30	-6.9
Iowa	31	-2.9	Oregon	31	-8.0
Louisiana	32	-3.3	Wisconsin	32	-8.4
West Virginia	33	-4.7	Arkansas	33	-8.5
Missouri	34	-5.5	Missouri	34	-10.3
Rhode Island	35	-6.0	Rhode Island	35	-10.3
New Jersey	36	-10.6	Tennessee	36	-10.4
Florida	37	-10.8	Iowa	37	-10.5
Indiana	38	-12.9	Utah	38	-10.5
Virginia	39	-14.1	Mississippi	39	-11.0
Tennessee	40	-14.5	Kentucky	40	-11.8
Michigan	41	-19.5	New Jersey	41	-12.4
Delaware	42	-23.0	Pennsylvania	42	-12.7
South Carolina	43	-23.7	Dist of Columbia	43	-13.8
Maine	44	-25.0	Indiana	44	-14.8
Washington	45	-29.1	New Hampshire	45	-15.2
Alabama	46	-30.1	Connecticut	46	-15.7
California	47	-34.3	California	47	-17.8
New York	48	-49.3	Colorado	48	-19.4
Nevada	49	-56.3	Ohio	49	-21.9
South Dakota	50	N/A	Vermont	50	-29.6
Dist of Columbia	51	N/A	New York	51	-39.4

Source: American Council on Education, Office of Minority Concerns, Minorities in Higher Education, Fifth Annual Report, 1986, p. 19; based on data from the U.S. Department of Education.

Exhibit IV-4. AVERAGE IN-STATE UNDERGRADUATE TUITION AND FEES IN PUBLIC FOUR-YEAR COLLEGES, 1986-1987.

Rank	State	Tuition
1	Vermont	2,942
2	Pennsylvania	2,496
3	New Hampshire	2,190
4	Virginia	2,070
5	Ohio	1,982
6	Michigan	1,877
7	New Jersey	1,861
8	Rhode Island	1,845
9	Minnesota	1,814
10	South Carolina	1,733
11	Illinois	1,708
12	Maryland	1,662
13	Indiana	1,627
14	Mississippi	1,603
15	Maine	1,561
16	Connecticut	1,527
17	Colorado	1,482
18	New York	1,431
	United States	1,414
19	South Dakota	1,409
20	Massachusetts	1,388
21	Iowa	1,385
22	Georgia	1,369
23	Louisiana	1,341
24	Washington	1,339
25	Oregon	1,296
26	Nebraska	1,292
27	Missouri	1,277
28	Alabama	1,275
29	Wisconson	1,271
30	Kansas	1,271
31	Montana	1,205
32	North Dakota	1,198
33	Utah	1,159
34	Kentucky	1,152
35	Arizona	1,136
36	Tennessee	1,133
37	Florida	1,055
38	Idaho	1,036
39	California	1,021
40	West Virginia	1,003
41	Nevada	988
42	Alaska	975
43	Hawaii	972
44	Arkansas	931
45	New Mexico	915
46	Delaware	906
47	Texas	885
48	North Carolina	818
49	Wyoming	778
50	Oklahoma	757
51	District of Columbia	634

Source: Digest of Education Statistics 1988, p. 253.

Exhibits IV-7 AND IV-8. STATE SUPPORT FOR THE STATE COLLEGES AS A PERCENT OF THE TOTAL NEW JERSEY STATE BUDGET AND AS A PERCENT OF NEW JERSEY PERSONAL INCOME.

Fiscal Year	State Support (Millions)	Total State Budget (Millions)	NJ Personal Income * (Millions)	State Support as a Percent of NJ State Budget	State Support as a Percent of NJ Personal Income
1975-76	69.8	2,704	51,328	2.58	0.136
1976-77	75.9	3,326	56,070	2.28	0.135
1977-78	95.0	3,954	61,290	2.40	0.155
1978-79	100.8	4,456	68,047	2.26	0.148
1979-80	109.7	4,770	75,769	2.30	0.145
1980-81	117.2	5,218	85,414	2.25	0.137
1981-82	125.0	5,733	95,189	2.18	0.131
1982-83	131.4	6,262	102,666	2.10	0.128
1983-84	140.4	6,861	111,163	2.05	0.126
1884-85	160.6	7,870	122,190	2.04	0.131
1985-86	179.6	8,653	131,542	2.08	0.137
1986-87	189.5	9,444	141,919	2.01	0.134
1987-88	222.5	10,577		2.10	

* Note: Personal income is for the calendar year which overlaps the first half of the fiscal year.

Sources: Annual New Jersey State Budgets.

U.S. Department of Commerce, Bureau of Economic Analysis. Survey of Current Business, August, 1987, p. 44.

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Exhibit IV-9. STATE SUPPORT FOR THE STATE COLLEGES IN CONSTANT 1986-87 DOLLARS, 1975-76 TO 1986-87.

Fiscal Year	Millions of Current Dollars	Higher Education Price Index (1971 = 100)	Millions of 1976 Dollars
1975-76	69.8	137.8	69.8
1976-77	75.9	146.7	71.3
1977-78	95.0	156.5	83.6
1978-79	100.8	168.7	82.4
1979-80	109.7	185.3	81.6
1980-81	117.2	205.2	78.7
1981-82	125.0	225.8	76.3
1982-83	131.4	240.1	75.4
1983-84	140.4	253.1	76.4
1984-85	160.6	270.1	61.9
1985-86	179.6	281.9	87.8
1986-87	189.5	293.6	88.9

Sources: Annual New Jersey State Budgets

Research Associates of Washington (Higher Education Price Index)

Exhibit IV-10. BUDGETED POSITIONS (INSTRUCTION) IN THE NEW JERSEY STATE COLLEGES AND RUTGERS, THE STATE UNIVERSITY, 1975-76 TO 1988-89

	Budgeted Positions	
Fiscal Year	State Colleges	Rutgers
1975-76	3628	2994
1976-77	3623	3144
1977-78	3452	3249
1978-79	3392	3167
1979-80	3349	3170
1980-81	3279	3164
1981-82	3250	3155
1982-83	3224	3147
1983-84	3221	3150
1984-85	3197	3149
1985-86	3185	3174
1986-87	3180	3192
1987-88	3168	3252
1988-89	3161	3330
Change From 1975-76 To 1988-89:	-467	+336

Source: Annual New Jersey State Budgets

Exhibit IV-11. EXPENDITURES PER STUDENT IN THE STATE COLLEGES, RUTGERS AND K-12 IN CURRENT AND CONSTANT 1976 DOLLARS

	Current Dollars			Higher	Constant Dollars		
Fiscal Year	State Colleges	Rutgers	K-12*	Education Index	State Colleges	Rutgers	K-12*
1976	1,748	2,961	1,875	137.8	1,748	2,961	1,875
1977	2,125	3,275	2,088	146.7	1,996	3,076	1,961
1978	2,471	3,561	2,320	156.5	2,176	3,136	2,043
1979	2,577	3,882	2,592	168.7	2,105	3,171	2,117
1980	2,759	4,030	2,854	185.3	2,052	2,997	2,122
1981	2,976	4,487	3,247	205.2	1,999	3,013	2,180
1982	3,300	4,945	3,730	225.8	2,014	3,018	2,276
1983	3,499	5,499	4,252	240.1	2,008	3,156	2,440
1984	3,917	5,986	4,720	253.1	2,133	3,259	2,570
1985	4,512	6,614	5,161	270.1	2,302	3,374	2,633
1986	5,088	7,311	5,675	281.9	2,487	3,574	2,774
1987	5,482	7,932	6,072	293.6	2,573	3,723	2,850
1988	6,493	9,033	6,799				

* Note: Includes debt service and pensions.

Source: Annual New Jersey State Budgets

Exhibits IV-12 and IV-13. STATE SUPPORT (EXPENDED) FOR THE STATE COLLEGES, RUTGERS, NJIT, AND THE MANAGEMENT AND ADMINISTRATIVE SERVICES BUDGET OF THE DEPARTMENT OF HIGHER EDUCATION

Fiscal Year	College Total	Edison	Glass-boro	Jersey City	Kean	William Paterson	Montclair	Trenton	Ramapo	Stockton	DHE Mangmt & Adm Serv	Rutgers	NJIT
1976	69,789	613	10,060	8,301	9,561	9,542	11,486	10,114	5,085	5,027		76,079	10,096
1977	75,927	646	11,298	8,801	9,199	11,663	12,376	10,371	5,233	6,340		81,213	11,023
1978	94,983	749	13,865	12,198	12,480	14,409	14,724	12,899	6,879	6,780		92,180	13,233
1979	100,847	867	12,789	13,066	13,313	15,282	16,183	14,962	7,278	7,107		106,724	14,370
1980	109,703	1,124	14,838	14,002	14,725	16,174	17,452	15,226	7,778	8,384		105,875	15,808
1981	117,195	1,230	15,493	14,815	15,778	17,313	19,146	16,342	8,130	8,948	3,201	113,874	16,453
1982	125,025	1,173	16,015	16,397	16,739	18,770	20,072	18,124	8,478	9,257	3,346	122,773	17,273
1983	131,378	1,341	18,198	16,939	17,968	19,138	20,066	18,844	8,837	10,047	4,117	128,843	18,078
1984	140,411	1,582	18,186	18,252	18,654	20,557	22,235	20,582	9,774	10,589	8,504	138,162	20,311
1985	160,626	1,878	21,418	20,490	21,816	23,917	25,566	21,683	11,431	12,427	10,960	159,433	22,487
1986	179,631	2,267	24,144	23,004	24,507	26,270	27,960	25,322	12,385	13,772	14,274	180,400	28,858
1987	189,510	3,422	25,385	24,395	25,703	27,383	30,025	25,700	13,714	13,783	18,404	199,317	33,411
1988	222,539	2,991	30,654	26,856	30,401	33,128	36,346	29,822	15,767	16,574	35,400	220,157	37,980
Adjusted Appropriation:													
1989	230,319	3,376	30,185	28,032	31,158	33,760	38,646	31,500	16,031	17,631	37,903	239,831	42,553